CCA-101: Fundamentals of IT & Programming

Assignment -1

Q1: What are the four fundamental parts of computer? Explain it with the help of diagram.

Q2: Discuss about the classification of computers based on size and capacity.

Q3: What is the meaning of computer generation? How many Computer Generations are defined? What technologies were/are used?

Q4: Differentiate between Volatile & Non- Volatile memories.

Q5: Distinguish among system software, application software and open source software on the basis of their features.

Q6. a) Create a file in MS-word to insert a paragraph about yourself and save it with file name "**yourself**". Describe all steps involved in it.

Q6 b) Write steps regarding followings

- To change the font style
- To change the font size
- To change the font color
- To highlight (in yellow) the line that reads "need to get IMS's address".

Q7. Create a file in MS-Word for the following document and save it with file name '**ms_word**'. Describe all steps involved in it.

MS Word

MS Word is a widely used commercial word processor developed by Microsoft.

MS word is application software, which is capable of

- creating,
- editing,
- saving, and
- **printing any type of document**

Q8. Create a file in MS-word for the following document and save it with file name '**equations**'. Describe all steps involved in it.

Equations

$X_2 + Y_5 = 30$

$Z^3 + Q^4 = 50$

$A_2 + B^n = X_2 + Y^n$

Q9. Create a file in MS-word that convert existing highlight text to table as shown below and save it as file name 'text_to_table'. Describe all steps involved in it.

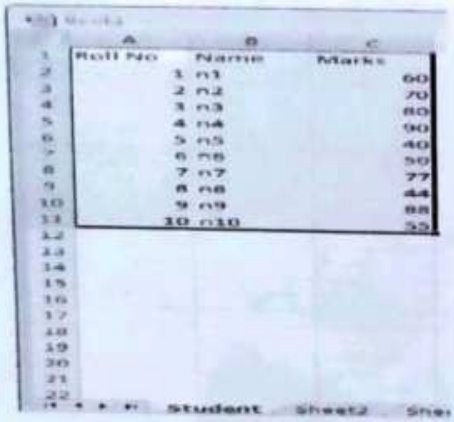
Select the text you want to convert
Select the **Insert** tab
Click on **Table** command. A dialog box appears
Click on **Convert Text to Table**, a new dialog box appears
here set number of columns
Click on OK Finally Selected text convert in a table

⇩

Select the text you want to convert	Select the **Insert** tab
Click on **Table** command. A dialog box appears	Click on **Convert Text to Table**, a new dialog box appears
here set number of columns	Click on OK Finally Selected text convert in a table

Q10. Create a file in MS-Word to insert a table in the document. Describe all steps involved in it.

Q11. Create a following worksheet in MS-excel and save it with name 'book1'.



Roll No	Name	Marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88
10	n10	55

Q12. Calculate the following things of a range (C2:C11) of data in the worksheet created in question no 10.

- the sum of the marks using AutoSum in a range of cells (C2:C11)
- average of the marks in a range of cells (C2:C11)
- highest marks in a range of cells (C2:C11)
- minimum marks in a range of cells (C2:C11)

Q13 a) Describe various steps involved in the following

- To modify column width of a worksheet
- *To modify the row height* of a worksheet
- *To delete rows and columns* of a worksheet

Q13 b) Describe following terms in the worksheet

- Absolute reference and relative reference in formula
- Cell address

Q14. a) What tools are available to customize our PowerPoint presentation?

Q14 b) Write the steps for the following action for creation of power point presentation

- Open a Blank presentation
- Save the presentation as Lab1.pptx

- Add a Title to the first slide: the name of your college
- Type your first name and last name in the Subtitle section
- Add a New Slide which has a Title and Content

Q15. Write steps for creation of a set of PowerPoint slides that demonstrates your skill to use the tools of PowerPoint. It should include the following things

- Title slide &bullet list
- Inserting Excel Sheet
- Clip art and Text
- Slide show effects

Part -2

Q16. What is the difference between Machine Language and High Level Language?

Q17. Discuss about different data types of C programming Language.

Q18. Find the output of the following expressions

a) X=20/5*2+30-5 b) Y=30 – (40/10+6) +10 c) Z= 40*2/10-2+10

Q19. Describe the syntax of the following statements

a) If – else statement b) for loop c) while loop d) do-while loop

Q20. Find the output of the following program segments

a)	b)	c)

[illegible]	#include <stdio.h>
	int main()
	{
	int i = 1;
	while (i <= 2)
	{
	printf("IMS Ghaziabad\n");
	i = i + 1;
	}
	}
		#include <stdio.h>
		void main()
		{
		int a = 10, b=100;
		if(a > b)
		printf("Largest number is %d\n", a);
		else
		printf("Largest number is %d\n", b);
		}

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CCA-101 - Fundamentals of IT & Programing

Assignment - 1

Q.1 What are the four fundamentals parts of Computer Explain in with the help of diagram.

Ans Four fundamental parts

1 Input unit
2 output Unit
3 Central Processing Unit [CPU]
4 Memory Unit / Storage Unit.

1. Input Unit :-

Input Units are all the devices you use to feed information to the Computer, such as a Keyboard, mouse, a hard drive. These devices in essence bring data from the "outside world" into your Computer.

2. Output Unit :-

Output units are the devices is used to transmit a Computer's data between devices or client. The bull of Computer output data designed for people is in audio or video format such as

Dated .....

Monitors, printers, Microphones, Projectors and headphones.

3. Central processing Unit [CPU] :-

CPU is Considered as the brain of the Computer it performs all types of data processing operations. it Stores data, intermediate results, and instructions it Controls the operation of all parts of the Computer. CPU its self has three components. i) control Unit (ii) ALU (Arithmetic logic Unit)

Memory or Storage Unit :-

Once the CPU converts a specific Set of a Computer program instructions ~~of~~ into machine Code it Stores ~~that~~ that machine code in primary Storage or memory. The machine Code will be treated as either data or instruction the CPU fethes data and instructions from memory. Uses on instruction to manipulate the data and then Sends the result and the next Set of intructions back to memory.

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Dated .....

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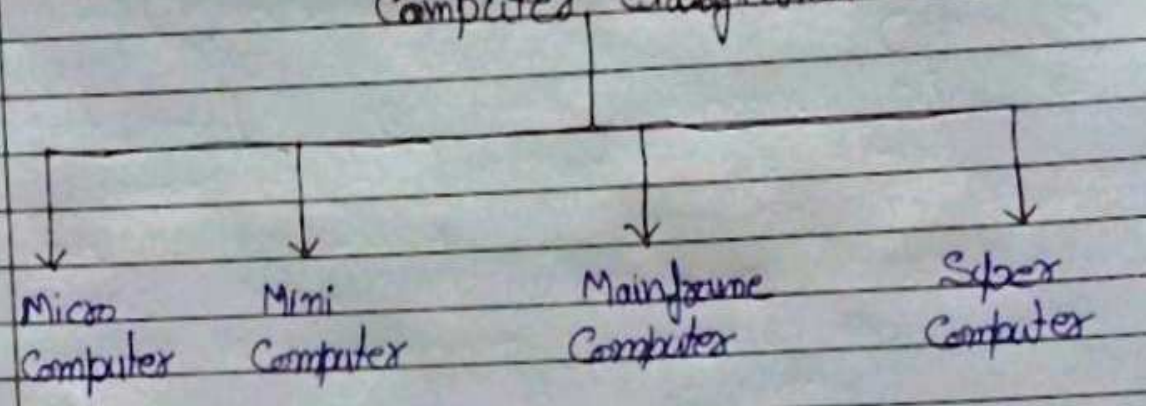
Q.2 Discuss about the classification of computer based on Size and capacity.

Ans :-



1. Micro Computer :-

You can See Such Computers at home like laptop, desktop, Smartwatches tablets All Computer's Components of a Microprocessor are on a Single integrated Circuit chip. the Microprocessor based Computer are called third generation Computers, they were invented in the 1970's.

2. Mini Computer :-

A Mini Computer were introduced in the 1960's. They were faster than Micro Computers. Basically these Computers were mainly multi-user systems where many users work on the Systems, Generally these types of

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Dated .....

Computers had larger memories and greater storage capacity. You can see such computers at the billing centers of malls or fo large. installation minicomputer was a multi user system which means more than one user could use this system simultaneously.

3. Mainframe Computer :-

Mainframe computer are large and expensive machines. The word length of mainframe computer may be 48, 60 or 64 bits, memory capacity being in some megabytes and storage capacity in some terabytes. Generally they handle huge volumes of information and data. In terms of speed, they are having significant processing capacity. They are used in research organizations large industries, airlines reservation where a large database has to be maintained.

4 Super Computer :-

Super computer is biggest fastest computer. The processing capabilities of super computer lies in the range

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Dated.....

of CRAY. Word length 64-128 or may be in 256 or so. The memory capacity of super computers is in some gigabytes or in terabytes. These Computer's are specifically designed for scientific applications i) Weather forecasting, Encryption decryption of passwords, testing for nuclear weapons, Scientific research of earth.

Q.3 What is the meaning of computer generation How many computer Generations are defined what technologies were/are used?

Ans

The modern computer took its shape with the arrival of your time it had been around 16th century when the evolution of the computer started. the initial computer faced many changes, obviously for the betterment. it continuously improved itself in terms of speed, accuracy, size, and price to give the form of the fashionable day computer. This long period is often come monthly divided into the subsequent phases called computer generations.

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There are Five generations of the Computer.

1. First Generation (1940-1956)
2. Second Generation (1956-1963)
3. Third Generation (1964-1971)
4. Fourth Generation (1971 - 20
5. Fifth Generation

1. First Generation :-)

The First Generation of Computer used Vacums tubes as a major peice of teamology. Vacums Tubes Were widdy use in computers from 1940 through 1956. Some of the First generation Computers took up an entice room The ENIAC is a great example of the first generations of the Computer.

2. Second Generation :-)

In the 1956s. trans sistors replaced tubes and used magnetic cores for memories (IBM 1620 Honeywell 800) Size was reduced and reliability was Significantly improved See IBM 1401 Honeywell.

3. Third Generation :-)

Third Generation of Computer

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used the first integrated circuits (IBM 360, CDC 6400) and the first operating system and database management systems.

4 Fourth generation :-> The Mid to late 1970s spawned the Microprocessor and personal Computer. Introducing distributed processing and office automation word processing query languages, report writers and spread sheets but large and numbers of people in touch with the Computers for the first time.

5. Fifth Generation :-> The 21st Century ushered in the fifth generation which includes singly delivers various forms of artificial intelligence (AI)

Q4 Differentiate between valatice and Non-valatile Memories.

Ans	valatile Memories	Non valatile Memory
1.	V/M is the type of memory in which data is lost as it is power off.	1) Non V/M is the type of memory in which data remains stored even it is powered off.

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Dated.....

	Volatile Memory	Non Volatile Memory
2.	This memory are stored temporarily.	2) This memory are stored permanently.
3.	it is faster than non-volatile memory.	3) it is slower than volatile memory.
4.	Example- RAM	4) Example :- ROM
5.	In V/M process can read and write.	5) In Non V/M memory process can only read.
6.	V/M is more costly per unit size.	6) Non-V/M is less costly per unit size

Q.5 Distinguish among system software application software and open source software on the basis of their features.

Ans: System Software :-

System Software is a type of computer programs that is designed to run computer's hardware and application programs system software is used to manage the computer itself. It runs in the background maintaining the

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basic functions so user can run higher - level application software to perform certain tasks.

Features :-

1. High speed
2. Hard to Manipulate.
3. Written in a low level language.
4. Difficult to Design.

Application Software →

An Application software is a computer program designed to carry out a specific task other than one relating to the operation of the computer itself typically to be used by end users

Features :-

1. written in a high level language.
2. Easy to design.
3. Bigger in size.
4. More Interactive.

Open Source Software :-

open source software is software with source code that

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anyone can inspect, Modify and enhance. Source code is the part of Software that most Computer users dont ever see, its the ~~tod~~ code computer programmers can manipulate to change how a piece of Software program or application works.

Features

1) Frocdon.
2 Integrity
3 continuity.
4 Final thoughts.

Q.6 Create a file in MS. Word to insrth a paragraph about yourself, and Save it with file name "yourself". Describe all steps invalved in it.

Ans following Steps :→

> open a MS Word.
> click on the page that you want to insert
> A paragraph.
> Write aparagrabh about your Self.
> Press Enter Key.

Q66 write Steps regarding followings.
To chang the font Style.

basic functions so user can run higher - level application software to perform certain tasks.

Features :-

1. High speed
2. Hard to Manipulate.
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Ans following Steps :→

> open a MS Word.
> click on the page that you want to insert
> A paragraph.
> Write aparagrabh about your Self.
> Press Enter Key.

Q66 write Steps regarding followings.
To chang the font Style.

> open a MS word.
> Select the particular text line paragraph
> click the drop down arrow to the font
> box on the home tab.
click on particular font style that you want to use.

To change the font size.
Select the particular text line or paragraph that you want to modify.

> Click the drop down arrow to the font size box on the home tab.

> click the desird font size from the menu

To change the font color.

> Select the particular text, line or paragraph the you want to modify.

> click the drop down arrow in the font color on the the home tab.
> click the particular color you want to use.

To highlight in yellow the line that reads "need to get IMS address."
> write that line "need to get IMS's address."
> Selat the whole line.

> click drop down arrow to display the high light color menu.

> click on the yellow color.

> Select first line " Ms word"

> click the dropdown arrow to the font size

> click the 24.

*> Select " MS word " In the Second line.

> click the dropdown arrow in the font color menu

> click the Red color.

> Select " word processor " in the second line.

> Press ctrl+U

> Select " Ms word " In the third line Press ctrl + I

Create a file in ms-word for the following document and save it with file name ms-word Describe all steps involved in it.

MS word

MS word is a widely used Commercial word Procession developed by microsoft ms word is an application software which is capable of

- creating
- saving
- editing
- Printing any type of document

Ans <Creating>

1. open ms word
2. write down the following document:

Editions.

1) Select particular text/line that you want to modi by

(a) click drop down arrow next to Font size box on the Home ten

(3.) click the particular size.

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1. Select the Particular text / line that you to modify
2. Click on the drop down arrow.
3. Click the Red Color

1. Select the Particular lined text that you wont to modify
2. Press Ctrl+U
3. Select the Particular line you wont to modify
4. Press Ctrl+I

Saving

1. Press Ctrl+S
2. write MS Word file home → click onto Printing ans type of document
3) Press Ctrl+P.

Qs Crate a file in ms - word for the following document and save in with file name equations Describe all steps involved in it.

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Equations

$x_2 + y_5 = 30$

$z_3 + Q_4 = 50$

$A_2 + B_8 = x_2 + y_8$

Ans Following steps

1) Open a ms ward
2) write the particular word / line / Paragraph
3) Select a particular ward
4) Press Ctrl+V

$y_2 + y_5 = 30$

1) Type x
2) Press Ctrl + = Sign key
3) 2 Press (numerical key)
4) Press shift +
5) type y
6) Press ctrl + =
7) type 5
8) Press = sign key
9) type = 30

$z^3 + Q_4 = 50$

1) Press 2
2) Press Ctrl + shift ++

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3) Press 3 (Numaic key)
4) Press Shift + sigh key
5) Press Q
(6) Press Ctrl + Shift + ++
(7) Press = Sign key
(8) Press 50 (Numaic kays')

$A_2 + B_8 = X_2 + Y^8$

1 Type A
2) Press Ctrl++
3) Press 2 (Numeric key)
4) than Paess Shift + =
5) Press B key
6) than Press Ctrl + Shift + Y
7) Type 8
8) Press = Sign key
9) Type X
10) than Press Cntl ++
11) Press Shift + Y = Sigh key
12) Type Y
13) Press Ctrl + shiff ++

Q9 Create a file in ms-word that convert existing Highlight text to table as shown below and save it as file Name text to table: Describe all steps involved in it:->

1) Open a ms word
2) type a particular paragraph.
3) select the particular words in the paragraph
4) then Press Ctrl+B
5) Select whole paragraph you want to convert.
6) Select the Insert ton
7) click on Table Command
8) Click Dialog box appears Here Set Numbes of columns.
9) then click OK

Dated.....

Q11 Create a following work sheet in ms-excel and save it with book

Ans Following steps :-

(1) open a ms excel
(2) Click on a A1 cel and type Roll No.
(3) Press Enter.
(4) type All data in a Range of cells (2:(1,2,3,4,5,6,7,8,9,10.)
(5) Click on ~~data in~~ a B1 cell and type Name
(6) ~~Press~~ Enter.
(7) types All data In a Range of cell 1320 : B11 (Shivha ---410)
(8) Click on a C1 Cell
(9) Press Enter
(10) type All data In a Range of cell C2 : C11 C35, 34, 95, 65; 75, 67)
(11) Press Ctrl +S
(12) type book
(13) than click Enter.

Dated.....

Q12 Calculate the follwing things of a range C(28 C11) of data in the work sheet created in question no 10.

(1) Open a MS - excel
(2) Click A_1 cell and type student
(3) than click B_1 cell and type student2
(4) Click C_1 cell and type total mats
(5) type Particulor Number date in a Range 8 cells ($A_2 : A_{11}$)
(6) type another Number data in Ci Range 7 Cales ($B_2 : B_{11}$)
(7) than Click C_2 Cell
(8) type =sum, than start bracket (), Select A_2 cell then
(9) Click enter)
10) Click on C_2 call
11 Move the Cursor on its Corner.
12 than you See the (+) Sigh
13 Click the + Sign and drag down the cursor to C_{11}.
14) then click enter.

Dated

Q.13(a) Describe various steps involved in the following.

→ To Modify Column width of a worksheet
→ To Modify the row height of a worksheet.
→ To delete rows and columns F a worksheet.

Following Steps ⇒

Steps :⇒

1) open a Ms excel.
2) Select a column that you want of Modify.
3. Click on a home tab.
4. Click on a cell group
5. Select from at > Column.
6. Type the Column width.
7. Click Enter.

B Steps ⇒
1) open a Ms excel.
2 Select a row that you want to Modify.

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Dated.....

3. Click on a Home tab.
4. Click on a cell group.
5. Select format > Row.
6. Type the Row haght.
7. Click ok.

(C) Steps :-

1. Open a ms excel.
2. Right click on a row and calums that you want to delete.
3. then press Delete Key.
4. Click ok.

Q.13

(b) Describe following terms in the worksheet.

→ Absolute reference and relative reference in formula.

→ Cell address.

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Following Steps => Absolute reference.

A) 1) open a ms excel.
2.) Select the cell that will contain the formula.
3.) Enter the formula to calculate the desired value.
4.) Press Enter on your Keyboard.
5.) The Fat Formula will calculate and the Result win display in the cell.
6) locate the Fill handle in the lower Right comber of the desired cell.
7. Click Hold and drag the Fill handle over the cell you want to Fill.
8) Release the mouse.
9) The formula the copied to the select cell with an absolute reference.

10 The values cwill be calulated in each cell.

Relative reference :-

1 Open a Ms excel.
2. Select the cell that you want to contain the formules.
3. Enter the formules to cafeculate the desired value. (cell, + Cell.)
4) Pxess enter on your Kayboard.
5) The formule will be calculated and the Result will be displaye in the cell.
6. Woate the Fill handle in the lower Right Camera of the desived Cell.
7. Click, hald and drag the Fill nandle over the cells you want to Fill.
8. Release the mouse.

Dated.....

9. The Formula will be copied to the selected cells with Relative References.

10 The values will be calculated in each cell.

Q.14 What tools are available to customize out PPTX.?

Ans

(1) Changing page Setup options.

2. changing to view in color / grayscale.

3. Navigating using presentation views.

In Normal view.
In Slide sorter view.
In Reading View.
In Slide Show View.

Q.4B) Write the steps for the following action for creation of ppt x?

1. open a Bank presentation.

following steps:-

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1. open power point.
2. press ctrl + M.

2. Save the presentation as Lab 1 Ppt x.

Following Steps :-

1. press ctrl + S
2. Tybe Lab 1 PPT x.
3. athen ctr + c

3. Add a title to the First Slide ; the name of your College.

Following Steps :-

1. open a power point.
2. click on the First Slide.
3. Then place your cursor in the click to add title " box on the Slide.
4. Type particaler College Name that you want.

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4. Type your First name and last name in the subtitle Section.

Following Steps:

1. open a power point.
2. Click on First slide.
3. Then place you cursor in the "Click to add Sittitle" box on the slide.
4. Type First Name and Last Name.

5. Add a New Slide which has a tittle and content.

Following Steps:

1. open a power point.
2. Go to the "Home" tab.
3. then click New slide.
4. Click on a tittle and content.

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Q.5 Write Steps for creation of a set of power point slides that demonstrate your skin to use the tools of power point. It should include the following things.

Title slide bullet list.

Following Steps :-

1. Go to the Ms power Point.
2. Click the New Slide list arrow.
3. Select the title Slide.
4. Title slide bullet list.
1. on the slide select the line or at in a text Placeholder that you want to add bullets.
2. Go to Home tab.
3. In the paragraph group click Bullets
4. Go to ms power point.
2. Click on the Insert Tab.

3. Than click object.

4. Select create from file.

5. Click Browse.

6. Select you Excel file (link)

7. Before you close the Insert tab.

8. Than select link and click ok.

1. Go to MS power point.

2. Click on the slide that you want to Insert a clip art file.

3. Go to Insert tab.

4. Select clip art from the image group

5. Type a word or phrase. that win describe the image you search for.

6. press enter key.

Dated.....

7. Select "clipart" if you want only clipart result

8 Select a Picture you want to use.

9. Then click Insert.

1. Open a. MS Power point.

2. Click the slide that you want to animate.

3. Click the animate tab.

4. Click the more arrow in the animation box.

5. You can also add entrance, exphasis or exit. animations.

6. Select that animations you want to us

7. click o.k.

Dated.....

Q.16 what is the diffoce between machine Language and High Level language?

Os	Hight Level Language	Low Level Language
1.	It is programmer priedly Language.	(1) It is a machine Language.
2.	High Level language is less memory efficient	(2) Low level lauguge is high memory effrient
3.	It is easy to understand.	(3) It is tough to understand
4.	It is simple to debug.	(4) It is complen to debug comparatively.
5.	It is simple to maintian.	(5) It is complex to maintain
6.	It is portable.	(6) It is non-portable
7.	It can run on aug Platform.	(7) It is machine-dependent
8.	It need compiler or interprete for translation.	(8) It has assembler for Translation.
9.	It is used widely in programming.	(9) It is not Commonly used now-a-days in programming.

Q.17 Discuss about different data types of C programming language.

Ans Each variable in C has an associated data type. Each data type requires different amount of memory and has some specific operations which can be performed over it. Let us briefly describe them one by one.

following are the example of some very common data types used in C:

Char: The most basic data type in C. it stores a single character and requires a single byte of memory in almost all compilers.

Int: As the name suggests an int variable is used to store an integer.

Float: it is used to store decimal numbers with single precision.

Double: it is used to store decimal numbers with double precision.