Deepika Dutta

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Assignment: 01

CCA:- fundamental of IT (programming)

1:- What are the four fundmental parts of computer

Ans:- The four fundamental parts of computer are:-

i:- [central processing unit [CPU]

ii:- [Memory [RAM] also known as valstile memory

iii:- Input :- [Keyboard, Mouse, Scanner etc.

iv:- oulput :- [Moniter, printer Speaker

2- Discuss about the classfication of computer based on size capacity.

Ans:- The bassis of Size there are a type of computer.

1 Mini Computer :- A mini computer is a medum sized computer more paurful than mini computer Example

(ii) **Micro computer :-** The processor is very small so that called micro processor and device is called micro computer. Micro computer is single user device example: Desktop, laptop, palmtop, Notebook, PDA etc.

(iii) **Mainframe Computer :-** It has larger processor and multi user device Number of users is more than mini computer. This is multi user and multi tasking devices mostly used in meteorology.

(iv) **Super Computer :-** This processor is biggest then other computer and processing capacity is higher then other devices. It is multi user fastest calculating devices generally used is nuclear science for calculation purpose Cray - 1 is the first super computer Indias first super computer is PARAM - 10000

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3:- what is the meaning of computer generation. How many generation are difind. what technologies were/are used

The generation of computer refers to the change in tachnalogical advancemend in the field of computer drom the birth of computer to the latest tachnalogy. The generation are classified accarding to the volution of the tecenalogy drom the beginning till dd date.

They are calegorized into five different generations. They are as follows.

i:- First Generation (1946 - 1959)
The age of vaeuum tubes

ii:- Second Generation (1959 - 1955)
The semiconductor transistor replaces Valum tubes.

iii:- Thired Generation (1965 - 1971)
Integrated Circuits (ICs)

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iv:- Fourth Generation (1971-1980)
(Very large integration)

v:- Fifth Generation (1980- till date and beyond) - ULSI (ultra large scale integration Artificial intligence Rebotiocs

4- Differentiate between volatile and non volatile memories.

	Volatile Memory	Non Volatile memory
i-	Volatile memory is type of memory where data is lost when power is turned off	Non Volatile memory is a type of memory data is not lost when a computer is switched off
ii-	data temporarily stored is volatile memory	data permanently stored in non volatile memory
iii-	it is faster then non volatile memory	it is slower then volatile memory

iv-	data it has storage capacity.	il has mors storage capacity then volatile memory.
v-	Data can be easly transferred.	Data can not be easly transferred.
vi-	it is more costly per unit size.	it is less costly per unit size.
vii-	CPU has direct access to data.	CPU has no direct access to data.
viii-	process can read and write.	process can only read
ix-	it has a high impact on the systeme perfar mance	it has a high impact on's systemes storage capacity.
x-	Data and pragram ~~delch by~~ that are currently delch by CPU are sto rege is valatile memory	Any king of data and programs are storeg in non valatile memory

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xi-	Example RAM and cache memory.	Example ROM and HDD

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

ans:- System software :-

System software are mainly designed for manging system resources.

i:-

ii- programming of system software is complex.

iii- A computer cannot run without system software.

vi- System software do not depend on application software.

Application software —

i- Application software are designed to accomplish tasks are specific.

purposes.

ii- programming of application software is comparatively easy.

iii- A computer can easily run system without application software.

iv- Application software depend on system software and cannot run without system software.

open source software :-

i- Source code is open to all.

ii- open source software license promote collaboration and sharing.

iii- less restriction on usability and modi-dication of software.

iv- Support is through forums information blogs and hiring experts.

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1- Write a program in c to display your name and address on computer screen.

Ans-
```
# include < stdio.h>
# include < conio.h>
  main ( )
{
printf ("\n my name is Deepika");
printf ("\n Ms dibulgamy");
getch ( );
}
```

2- Write a program in c to add two integer numbers.

Ans-
```
# include < stdio.h>
# include <conio.h>
main()
{
int a = 10; b= 20; int sum = 0;
sum = c = a+b;
print ("sum of %d", sum);
```

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3- Write a programe in c to computer the value of x in this expression $x = 20 / (8-4) * 8 - 2$

Ans:-

```
# include < studio . h >
# include < conio . h >
 main ()
{
int x . b, a, c, d;
 b = 20;
 a = 8;
 c = 4;
d = 8;
e = 2;
x = b / ca -
 print ("
 }
```

4- Write a program in c to computer a quotient and remainder.

Ans- Solution :-

```
# include < studio . h >
 Void main () {
```

~~Void~~ int declared, ~~test~~ devisor, remainder

il declared vasiables as intager type pri

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```
print ("Enter dicident : ");
Scant ("%d", & diciser);
quatient = dicident / diciser;
Semeindu = dicident % diciser;
printf ("quatient = %d \n", quatient
printf ("remainder = %d", semeainder
}
```

out put :—

Enter deiciend : 30

Enter deciser : 3

quatient = 6

remander = 2

5- Write a program in C to swap the valueal two inleger numbers.

Ans:- Solutions :—

Swap numbers using timpsory Vauiab

```
# include <studio.h>
  Vaid main ( ) 3
   int n1, n2 lamp
   n = 10;
   n = 20;
   lamp = n1
   n1 = n2
   n2 = lamp
```

printf ("\n after swapping n1 numbers =%d : n1);
printf ("\n after swapping, n2 numbers =% d n2);
output
After swapping, n1 number = 20
After swapping, n2 number = 10
Swap number without using timpsary numbers
include <stdio . h>
Vaid main ( )
int n1 , n2
n1 = 10;
n2 = 10;
" swapping
n1 = n1 - n2;
n1 = n1 + n2;
n1 = n2 - n1;
printf ("\n after swapping, n1 numbers =% d ", n1);
printf ("\n after swapping, n2 number =% d ", n2

6:- write a program to find the largest of theres numbers.

Ans- Solutions :-

```
# includs < studio . h>
Voud main ( )
{
inl n1, n2, n3, largest
printf (" inter three different numbers:"
 if (n1>n2)
  ~~large~~ lgerest = n1;
 else
  largest = n2;
    if (n3> = largest)
      largest = n3;
printf (" largest numbers is % d ,"larg
 }
```

7:- Write a program to cheek whether a intigar number is even or odd

Ans- Salution :-

```
# include < studio . h>
    Void main ( )
{
  int num;
print ("Enter a number:");
```

```
scanf ("%d", &num);
if (num%2 == 0) {
printf ("Even number");
else
printf ("odd number");
}
```

8:- Write a program to display table of any integer number.

Ans- Solution :-

```
# include <studio.h>
  Void main ( ) {
int n, i)
printf ("%d", &n);
for (i=1; i<=10; ++;) {
printf ("%d %d = %d \n", n, n, n, n);
}
}
```

9:- Write a program to display first ten terms of the fibonacci sequence.

Ans- Solution :-

The fibonacci Sequence: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

The fibonacci sequence is a sequence where the next term is the sum of the two terms.
The first two terms of the fibonacci sequence are followed by :-

```
# include <studio.h>
Void main ( ) {
int i, n, t1 = 0, t2 = 1, next term;
print ("enter the number of terms:");
Scanf ("%d", & n);
printf ("fibonacci series:");
for (i = 1; <= n; ++i) {
 print f ("%d, ", t1);
next term = t1 + t2;
t1 = t2;
t2 = next term;
}
}
```

10:- write a program to calculate the sum of digits of an integer number.

Ans:- Solution :-

```
# include < studio.h>
Vaid main ( ) {
```

```
int n, sum=0, digit;
printf("enter an leger:");
Scanf("%d", &n);
while (n=0) {
digit = n% d =, &n);
  while (n/=0) {
digit = n% 10;
Sum = sum+digit;
  n = n / 10;
}
printf("Sum of the digits=%d", sum);
}
```

11:- write a program to reverse an integer number.

Ans:- Solution:-

```
# include < ~~studio~~ stdio.h>
  Void main() {
inte n rev=0, digit;
printf("enter an integer:");
Scanf("%d", &n);
white (n% 10;
 rev = rev lot digit
n = n 10;
}
```

printf("reversed number = %d", rev);
}

12:- Write a program to calculate of a position integer.

Ans:- Solution :-

```
# include < studio . h>
    Vaid main( ) {
    int num,;
printf("enter a positive integer:");
Scanf("%d", & num);
printf("factors of %d are:", num);
for (i = 1 ii <= num i++ i) {
printf if (num % i == =0) {
printf("%d", i);
}
}
}
```