Solutions.

Solution - 1

```
# include < stdio.h >
void main () {
    Printf ("\n Payal Pashi "); // it displays the string inside quotation on computere screen.
    Printf ("\n madhurea"); // it displays the string inside quotation on computere screen }
```

output

Payal Pashi
madhurea

Solution - 2

```
# include < stdio.h >
void main () {
int , n1 , n2 , sum ; // it declares three variable n1, n2 and sum as integere type
Preitf (" Entere two integere numbers :");
Scanf ("%d %d" ) &n1, &n2 ); // it reads two numbers that aree stored in variables n1 and n2 reespectively
Sum = n1 + n2 ; // calculating sum
Printf ("sum = %d", sum); // it displays the value of sum }
```

output

Entere two integere numberes : 10, 20
sum = 30

Solution-3.

```
# include < stdio.h>
 void main (){
   int x;
x = 20/(8-4)* 8-2 ;
     Printf ("x = %d", x); // it displays
    the value of x
    }
```

output

x = 38

Solution — 4

```
# include < stdio.h>
   void main (){
   int dividend, divisore, quotient
   remaindere ; // it declares
   vareiables as integere type
```

```
Preintf ("Entere dividend:");
Seanf ("%d", & dividend); // it reads the value
 of dividend
Preintf("Entere divisore); //
scanf ("%d", & divisore); //it reads the value of
divisore.
quotient= dividend / divisore ; // it computes quotient
reemaindere = dividend % divisore ;// it computes
 reemaindere
Preintf ("Quotient =%d\n" quotient); // it displays
the value of quotient.
Preintf (" Remaindere =%d", reemainder); // it
displays the value of reemaindere }
```

Output

```
Entere dividend : 20
Entere divisore : 3
Quotient = 6
Remaindere = 2
```

Solution - 5

swap numbere using temporarey vareiable.

```
# include <studio.h>
 void main () {
   int n1, n2, temp;

 n1= 10 ;
n2= 20;
```

```
temp = n1; // value of n1 is assigned to temp
n1 = n2 // value of n2 is assigned to n1
n2 = temp; // value of temp (initial value of n1)
is assigned to n2
Preintf ("\n Aftere swapping, n1 numbere = %d", n1);
Preintf ("\n Aftere swapping, n2 Numbere = %d", n2);
}
```

Out Put

After swapping, n1 Numbere = 20

After swapping, n2 Numbere = 10

In the above Preogream, the temp vareiable is assigned the value of the n1 vareiable.
Then, othere the value of the n1 vareiable is assigned to need the n2 vareiable.
Finally the temp (which holds the ini-tial value of n1) is assigned to n2. This completes the swapping Preocess.

swap numberes without using temPoreary variables.

```
# include < stdio. h >
void main () {
    int n1, n2;
      n1 = 40;
      n2 = 10;
// swapping
n1 = n1 - n2; // n1 = 40 - 10 so n1 = 30
n2 = n1 + n2; // n2 = 30 + 10 so n2 = 40
n1 = n2 - n1; // n1 = 40 - 30 so n1 = 10
```

```
Preintf ("\n Aftere swapping. n1 Numbere =%d", n1);
Preintf ("\n Aftere swapping. n2 Numbere=%d", n2);
}
```

OutPut

Aftere swapping, n1 Numbere = 10
Aftere swapping, n2 Numbere = 40

Solution - 6

```
# include < stdio.h >
void main () {
int n1, n2, n3, laregest ;
Preintf ("Entere three differend numberes :");
scanf ("%d %d %d", &n1, &n2 &n3);
 if (n1 > n2)
   laregest = n1;
      else
    laregest = n2;
    if (n3 >= laregest)
      laregest = n3;
   Preintf ("Laregest numbere is %d", laregest);
   }
```

OutPut

Entere three numberes: 30, 20, 40
Laregest numbere is 40

Solution 7

```
# include < stdio.h >
   void main () {
     int num ;
```

```
Preintf (" Endere a numbere : ");
scanf ("%d", &num);
if ((num % 2) == 0) {
Preintf (" Even numbere ");
else
   Preintf ("Odd numbere");
}
```

outPut 1

Endere a numbere : 72

Even numbere

outPut 2

Endere a numbere : 10

Solution 8

```
# include <stdio.h>
 void main () {
 int n, i;
Preintf (" Endere an integere :");
scanf ("%d", &n);
for (i = 1; i <= 10; ++ i) {
   Preintf ("%d * %d = %d \n", n, i, n * i );
   }
   }
```

out Put

Endere an integere : 9

9 * 1 = 9
9 * 2 = 18
9 * 3 = 27
9 * 4 = 36
9 * 5 = 45
9 * 6 = 54
9 * 7 = 63
9 * 8 = 72
9 * 9 = 81
9 * 10 = 90

Solution 9

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 Previous two term.

The first two terms of the Fibonacci sequence are 0 Followed by 1.

```
# include <stdio.h>
void main (){
 int i, n, t1 = 0, t2 = 1, next term;
Printf ("Enter the number of terms:");
 scanf ("%d", &n);
 Printf (" Fibonacci Series:");
for (i=1 ; i<=n; ++i){
 Printf ("%d,", t1);
next Term = t1 + t2;
t1 = t2;
t2 = next Term;
}
}
```

Out Put

Enter the number of term: 10

Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

Solution-10

```
# include <stdio.h>
 void main () {
int n, sum = 0, digit;
 Printf (" Enter an integer:");
 Scanf ("%d", &n);
```

```
while (n != 0){
digit = n % 10;
sum = sum + digit
n = n / 10;
} Printf ("Sum of the digits = %d", sum);
}
```

Out Put

Enter an integer : 142
Sum of the digits = 7

This Program takes an integer input from the user 142. The while loop is used until n != 0 is false In each iteration of the loop, each digit (using digit = n % 10) when n is divided by 10 is calculated and the value of n is reduced by 10 times (n = n / 10). Inside the loop, the sum of digits of an integer number is computed using sum = sum + digit.

Solution II

```
# include <stdio.h>
Void main (){
int n, rev = 0, digit.
Printf ("Enter an integer:");
scanf ("%d", &n);
while (n != 0 ){
digit = n % 10;
rev = rev * 10 + digit;
n = n / 10;
} Printf ("Reversed number = %d", rev);
}
```

Ouput

Enter an integer: 345

Reversed number = 543

This Program takes an integer input from the user 345. The while loop is used until n!=0 is false. In each iteration of the loop, the digit (digit=n%10) when n is divided by 10 is calculated and the value of n is reduced by 10 times (n=n/10). Inside the loop, the reversed number is computed using : rev * 10 + digit.

Solution 12

```
# include < stdio.h >
void main(){
 int num, i;
printf("Enter a Positive integer:");
scanf("%d", & num);
printf("factors of %d are:", num);
for(i=1; i<=num; ++i){
      if(num % i==0){
      printf("%d", i);
       }
    }

}
```

Ouput

Enter a Positive integer: 10

Factors of 10 are: 1, 2, 5, 10