ASSIGNMENT-6

1. Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, the loop terminates.

PROGRAM:

```
#include<stdio.h>

int main()

{

   int i, num, sum=0;

   for(i=1; i<=10; i++)

   {

      printf("Enter A Number: ");

      scanf("%d", &num);

      if(num < 0)

      break;

      sum = sum + num;

   }


   printf("The Sum Is %d", sum);


   return 0;

}
```

OUTPUT:

```
Enter A Number: 5

Enter A Number: 10

Enter A Number: 15

Enter A Number: 20

Enter A Number: 25

Enter A Number: 60
```

Enter A Number: 70

Enter A Number: 80

Enter A Number: 35

Enter A Number: -5

The Sum Is 320

2. Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, it's not added to the result.

PROGRAM:

```
#include<stdio.h>
int main()
{
   int i, num, sum=0;
   for(i=1; i<=10; i++)
   {
      printf("Enter A Number: ");
      scanf("%d", &num);
      if(num < 0){
      continue;}
      sum = sum + num;
   }

   printf("The Sum Is %d", sum);

   return 0;
}
```

OUTPUT:

Enter A Number: 5

Enter A Number: 10

Enter A Number: 15

Enter A Number: 20

Enter A Number: -5

Enter A Number: 44

Enter A Number: 55

Enter A Number: -10

Enter A Number: 28

Enter A Number: 95

The Sum Is 272

3. Take input from the user until he/she enters zero(Using Break).

PROGRAM:

```
#include<stdio.h>
int main()
{
   int i, num, sum=0;
   for(i=1; i>0; i++)
   {
      printf("Enter A Number: ");
      scanf("%d", &num);
      if(num == 0)
      break;
   }
      return 0; }
```

OUTPUT:

Enter A Number: 5

Enter A Number: 10

Enter A Number: 15

Enter A Number: 20

5. Print sum of odd numbers between 0 and 10 (Using Continue).

PROGRAM:

```
#include<stdio.h>
int main()
{
   int i, sum=0;
   for(i=1; i<=10; i++)
   {
      if(i % 2 == 0)
      continue;
      sum = sum + i;
   }

   printf("The sum of odd numbers are %d", sum);
   return 0;
}
```

OUTPUT:

The sum of odd numbers are 25

7. Print all even numbers from 1 to 100 (Using Continue).

PROGRAM:

```
#include<stdio.h>
int main()
{
   int i;
   printf("The Even Numbers From 1-100 Are:\n");
   for(i=1; i<=100; i++)
   {
      if(i % 2 != 0)
      continue;
      printf("%d \n", i);
   }

   return 0;
}
```

OUTPUT:

```
The Even Numbers From 1-100 Are:
2
4
6
8
10
12
14
16
18
```

20

22

24

26

28

30

32

34

36

38

40

42

44

46

48

50

52

54

56

58

60

62

64

66

68

70

72

74

76

78

80

82

84

86

88

90

92

94

96

98

100

4. Check whether the given number is prime or not (Using Break).

PROGRAM:

```
#include <stdio.h>
int main()
{
  int n, i, c=0;
  printf("Enter a Number: ");
  scanf("%d",&n);

  for(i=2; i<n; i++)
  {
    if(n % i == 0)
```

```
    {
      c = c + 1;
      break;
    }

  }

    if(c == 0)
    printf("%d Is A Prime Number", n);
    else
    printf("%d Is Not A Prime Number", n);

    return 0;
}
```

OUTPUT:

```
Enter a Number: 5
Is A Prime Number
```

6. Check whether the given number is prime or not (Using Continue).

PROGRAM:

```
#include <stdio.h>
int main()
{
  int n, i, c=0;
  printf("Enter a Number: ");
  scanf("%d",&n);
```

```
  for(i=1; i<=n; i++)
  {
    if(n % i != 0)
      continue;
      c = c + 1;
   }

    if(c == 2)
    printf("%d Is A Prime Number", n);
    else
    printf("%d Is Not A Prime Number", n);

    return 0;
}
```

OUTPUT:

```
Enter a Number: 4
    4   Is Not A Prime Number
```

8. Print numbers from 1 to 10 using goto statement (Using goto).

PROGRAM:

```
#include <stdio.h>
int main()
{
  int n=1;
  L1:
  printf("%d\n", n);
  n++;
```

```
  if(n <= 10)
  goto L1;
  return 0;
}
```

OUTPUT:

1

2

3

4

5

6

7

8

9

10

9. Program to calculate the sum and average of positive numbers, If the user enters a negative number, the sum and average are displayed (Using goto).

PROGRAM:

```
#include <stdio.h>

int main(){
int c=0,n,sum=0;
float avg=0;

li:
printf("Enter a number :: ");
```

```
scanf("%d",&n);
if(n>0){
  sum += n;
  c +=1;
}
if(n>0){
  goto li;
}

printf("Sum of given number = %d \n",sum);
avg = sum/c;
printf("Average of the given number = %f",avg);

return 0;
}
```

OUTPUT:

```
Enter a number :: 5
Enter a number :: 6
Enter a number :: 3
Enter a number :: 8
Enter a number :: 9
Enter a number :: 4
Enter a number :: -5
Sum of given number = 35
Average of the given number = 5.000000
```

10.Check if a number is even or not (Using goto).

PROGRAM:

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    int num;
    printf("Enter a number\n");
    scanf("%d", &num);

    if (num % 2 == 0)
        goto even;
    else
        goto odd;

even:
    printf("%d is even\n", num);
    exit(0);
odd:
    printf("%d is odd\n", num);
}
```

OUTPUT:

```
Enter a number
5
5 is odd
```