ASSIGNMENT-6

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

```
#include<stdio.h>
int main()
{
    int num, i, sum=0;
    printf("Enter number: ");
    for(i=0;i<10;i++)
    {
        scanf("%d",&num);
        sum= sum+num;
        if( num<0 )
        break;
    }
    printf("Sum of the given number:%d",sum);
    return 0;
}</pre>
```

Output:-

```
Enter number: 2
3
2
3
5
3
4
3
2
1
Sum of the given number:28
```

```
Enter number: 3
2
-4
Sum of the given number:1
```

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

```
#include<stdio.h>
int main()
{
  int num, i, sum=0;
    printf("Enter number: ");
  for(i=0;i<10;i++)
{</pre>
```

```
scanf("%d",&num);
if( num<0 )
  continue;
  sum=sum+num;
}

printf("Sum=%d",sum);
return 0;
}
Output:-</pre>
```

```
Enter number: 1
2
-1
2
-1
1
1
1
1
1
Sum=10
```

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

```
#include <stdio.h>
int main()
{
   int num,i;
   printf("enter the number: ");
   while(1)
   {
      scanf("%d",&num);
      if(num==0)
      break;
   }
   return 0;
}
```

Output:-

```
enter the number: 2
 ..Program finished with exit code 0
Press ENTER to exit console.
```

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

```
#include <stdio.h>
int main()
  int num, i, count = 0;
  printf("Enter the number: ");
  scanf("%d", &num);
  for (i = 2;i<=num/2;++i)
    if (num \% i == 0)
      count = 1;
      break;
    }
  }
    if (count == 0)
      printf("%d is a prime number", num);
    else
      printf("%d is not a prime number", num);
  return 0;
}
Output:-
Enter the number: 20
20 is not a prime number
5. Print sum of odd numbers between 0 and 10. (Using Continue)
```

```
#include <stdio.h>
int main ()
```

```
int i, sum = 0;
for (i = 0; i < 10; i++)
{
 if (i % 2 == 0)
 continue;
 sum = sum + i;
printf("sum of odd number between 0 to 10: %d",sum);
return 0;
}
Output:-
sum of odd number between 0 to 10: 25
6. Check whether the given number is prime or not.(Using Continue)
#include <stdio.h>
int main()
{
  int num, i, count = 0;
  printf("Enter the number: ");
  scanf("%d", &num);
  for (i = 2; i < = num/2; ++i)
  {
    if (num \% i == 0)
      count = 1;
      continue;
    }
  }
    if (count == 0)
      printf("%d is a prime number", num);
      printf("%d is not a prime number", num);
  return 0;
Output:-
Enter the number: 5
5 is a prime number
```

```
Enter the number: 10
10 is not a prime number
```

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

```
#include <stdio.h>
int main ()
{
  int i;
  printf("even numbers between 0 and 100: ");
  for(i=0;i<=100;i++)
{
    if(i%2!=0)
    continue;
    printf("%d\n",i);
}
  return 0;
}</pre>
```

Output:-

```
even numbers between 0 and 100: 0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
```

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

```
#include <stdio.h>
int main()
{
    int count=1;
    start:
    printf("%d ",count);
```

```
count++;
if(count<=10)
goto start;

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)

```
#include<stdio.h>
int main()
 int num,sum=0,avg=0;
 printf("Enter the number: ");
   start:
 scanf("%d",&num);
 if(num<0)
 goto stop;
 sum = sum + num;
 //avg=sum/num;
 goto start;
 stop:
 printf("Sum:%d\n",sum);
 //printf("Average:%d\n",avg);
 return 0;
}
Output:-
Enter the number: 2
Sum:6
```

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

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

```
int num;

printf("Enter a number");
scanf("%d", &num);

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

even:
    printf("%d is even\n", num);
odd:
    printf("%d is odd\n", num);
}
Output:-
Enter a number3
3 is odd
```