Assignment 6

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

```c
#include<stdio.h>

int main()

{

   int i,n,sum=0;

   printf("YOU HAVE TO ENTER 10 NUMBERS,ENTER NEGATIVE NUMBER FOR EXIT\n\n");

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

   {

      printf("Enter number %d : ",i);

      scanf("%d",&n);

      if(n<0)

         break;

      sum=sum+n;

   }

   if(i!=11)

   {

      printf("You have entered total %d numbers and last number is a negative number\n",i-1);

      printf("Sum of %d numbers is %d",i-1,sum);

   }

   else

   {

      printf("Sum of 10 numbers is %d",sum);

   }

   getch();

   return 0;

}
```

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

```c
#include<stdio.h>
int main()
{
    int i,n,sum=0;
    printf("YOU HAVE TO ENTER 10 NUMBERS,ENTER NEGATIVE NUMBER FOR EXIT\n\n");
    for(i=1; i<=10; i++)
    {
        printf("Enter number %d : ",i);
        scanf("%d",&n);
        if(n<0)
            continue;
        sum=sum+n;
    }
    printf("Sum of 10 numbers is %d  \"Negative number excluded\"",sum);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int arr[100],i=0,n;
    while(n!=0)
    {
        printf("Enter number : \"ENTER ZERO FOR STOP\" ");
        scanf("%d",&n);
        if(n!=0)
            arr[i]=n;
        i++;
    }
    printf("Numbers you have entered :\n");
    for(n=0; n<i-1; n++)
        printf("%d ",arr[n]);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int n,i;
    printf("Enter a number : ");
    scanf("%d",&n);
    for(i=2; i<n; i++)
    {
        if(n%i==0)
            break;
    }
    if(i==n)
        printf("%d is PRIME",n);
    else
        printf("%d is NOT Prime",n);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>

int main()
{
    int n,i,sum=0;
    for(i=1; i<10; i++)
    {
        if(i%2==0)
            continue;
        sum=sum+i;


    }
    printf("Sum of Odd numbers between 1 to 10 is %d",sum);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int i,n,c=0;
    printf("Enter number : ");
    scanf("%d",&n);
    for(i=1; i<=n; i++)
    {
        if(n%i!=0)
            continue;
        c++;
    }
    if(c==2)
        printf("%d is PRIME",n);
    else
        printf("%d is NOT PRIME",n);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int i;
    for(i=2; i<=100; i++)
    {
        if(i%2!=0)
            continue;
        printf("%d ",i);
    }
}
```

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

```c
#include<stdio.h>
int main()
{
    int i=1;
    l: printf("%d ",i++);
    if(i<=10)
        goto l;
    getch();
    return 0;
}
```

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).

```c
#include<stdio.h>
int main()
{
    int n,i=1,sum=0,avg;

    l1: printf("Enter number : ");
        scanf("%d",&n);
        if(n<0)
            goto l2;
        sum=sum+n;
        avg=sum/i;
        i++;
        printf("Sum = %d   Average = %d \n",sum,avg);
        goto l1;
    l2: printf("SUM = %d   AVERAGE = %d ",sum,avg);
    getch();
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter a number : ");
    scanf("%d",&n);
    if(n%2==0)
        goto even;
    else
        goto odd;
    even: printf("%d is Even number",n);
    exit(0);
    odd: printf("%d is odd number",n);
    getch();
    return 0;
}
```