Assignment 3

1. Print numbes from 1 to 10

```
//Print numbes from 1 to 10.
#include <stdio.h>
void main()
{
    int a = 1;
    while (a<=10){
            printf("%d\n",a);
            a++;
    }
}
```

2. Print table for the given number

```
//Print table for the given number.
#include <stdio.h>
void main()
{
    int num, a=1, b;
    printf("Enter a number:");
    scanf("%d", &num);

    while(a<=10){
            b= num*a;
            printf("%d\n",b);
            a++;
    }
}
```

3. Calculate sum of numbers in the given range.

```
#include <stdio.h>
void main()
{
    int a, b, sum = 0;
    printf("Enter the range of numbers:");
    scanf("%d, %d", &a, &b);
    int i;
    for(i=a; i<=b; i++)
    sum = sum+i;
    printf("The sum of numbers in a given range is %d",sum);

}
```

4. Check number is prime or not

```
//Check number is prime or not.
#include <stdio.h>
void main()
```

```
{
    int num, i=2, flag = 0;

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

    if (num ==0 || num ==1){
            flag = 1;
    }
    for(i=2; i<=num/2; i++){
            if(num%i==0){
                    flag = 1;
                    break;
            }
    }
    if(flag == 0){
            printf("Number is prime number");
    }else
    printf("Number is not a prime number");
}
```

5. Check number is armstrong or not

```
//Check number is armstrong or not?
#include <stdio.h>
void main()
{
    int num, count=0, temp, rem, sum=0;

    printf("Enter the number");
    scanf("%d", &num);
    for(temp = num; temp>0; temp= temp/10){
            count++;
    }
    for(temp = num; temp>0; temp = temp/10){
            rem = temp%10;
            int res = 1;
            int i;
            for(i=1; i<=count; i++){
                    res = res*rem;
            }
            sum = sum+res;
    }
    if(num == sum){
            printf("Number is a armstrong number");
    }else
```

```
    printf("Not a armstrong number");
}
```

6. Check number is perfect or not

```
//Check number is perfect or not.
#include <stdio.h>
void main()
{
    int i, sum=0, num;
    printf("Enter a number:");
    scanf("%d", &num);
  int j;
for (j=1; j<=num/2; j++){
    if(num%j==0){
            sum = sum + j;
    }
}if(sum==num){
    printf("Number is a prefect number");
}else
    printf("Number is not a perfect number");
}
```

7. **Find factorial of number**

```
//Find factorial of number.
#include <stdio.h>
void main()
{
    int num, fact=1;
    printf("Enter a number:");
    scanf("%d", &num);
            int i;
    for(i=num; i>0; i--){
            fact = fact * i;
    }
    printf("The factorial of number is %d", fact);
}
```

8. Check number is strong or not.

```
//Check number is strong or not.
#include <stdio.h>
void main(){
    int num, temp, rem, sum = 0;
    printf("Enter a number");
    scanf("%d", &num);
for(temp = num; temp>0; temp = temp/10){
    rem = temp %10;
    int i;
```

```
    int fact = 1;
    for(i=rem; i>0; i--){
            fact = fact * i;
    }
    sum = sum + fact;
}if(sum == num){
            printf("Number is a strong number");
    }else
    printf("Number is not a strong number");
}
```

9. **Check the given number is palindrome or not?**

```
//Check the given number is palindrome or not?
#include <stdio.h>
void main()
{
    int num, rev=0, rem, temp;
    printf("Enter a number: ");
    scanf("%d", &num);
   for(temp = num; num>0; num = num/10){
    rem = num%10;
    rev = rev*10+rem;
    }

    if(rev == temp){
            printf("Number is a palindrome");
    }else
    printf("Number is not a palindrome");
}
```

10.Add the (first and last) digit of a given number

```
//Add the (first and last) digit of a given number.
#include <stdio.h>
void main()
{
    int num, rem, sum;
    printf("Enter a number");
    scanf("%d", &num);

            rem = num%10;
            int temp = num;
            while(temp>=10){
                    temp = temp/10;
    }
            sum = rem+temp;
    printf("The sum of first and last digit of the number is: %d", sum);
```

}