Assignment 4

1. Print armstrong number in the the given range 1 to n?

```c
//Print armstrong number in the the given range 1 to n
#include<stdio.h>

void main(){

    int range,i;

    printf("Enter range:");
    scanf("%d",&range);

    int temp, rem, sum , mul;

    int tempcount;
    for(i=1; i<=range;i++){
            temp =i;
        int  count=0;
    while(temp>0){

            count++;
            temp=temp/10;
    }

    temp = i;
    sum = 0;
    while(temp>0){

            rem = temp%10;
            tempcount=count;

            mul=1;
            while(tempcount>0){

                mul = mul*rem;
                tempcount--;
            }

            sum = sum+mul;
            temp=temp/10;
    }
    if(sum==i)
    printf("%d\n", i);
    }
```

```
}
```

2. Print prime number in the given range 1 to n?

```c
//Print prime number in the given range 1 to n
#include <stdio.h>
int main()
{
    int range, i, j, flag;
    printf("Enter the range:");
    scanf("%d", &range);

    for(i=2;i<=range;i++){

            flag = 0;
            for(j=2;j<=i/2;j++){
                    if(i%j==0)
                    {
                            flag=1;
                            break;
                    }
            }if(flag == 0)
            printf("%d\n",i);
    }
}
```

3. check perfect number in the given range 1 to n?

```c
//check perfect number in the given range 1 to n?
#include <stdio.h>
int main()
{
    int n, i,sum;
    printf("Enter range:");
    scanf("%d", &n);

    for(i=1;i<=n;i++){
            sum =0;
            int j=1;
            while(j<=i){
            if(i%j==0){
                    sum = sum + j;
            }
            j++;
}if(sum==i)
    printf("%d\n", i);
    }
}
```

4. check strong number in the given range 1 to n?

```c
//check strong number in the given range 1 to n?
#include<stdio.h>

void main() {
    int  b, num,i,temp;

    int sum;

    printf("Enter the range : ");
    scanf("%d",&b);
    int rem,fact;
    for (num = 1; num <= b; num++) {
        temp = num;
        sum=0;
        while (temp > 0) {
            rem = temp % 10;
            fact = 1;
            while(rem>0) {
                fact = fact * rem;
                rem--;
            }
            sum =sum + fact;
            temp =temp/ 10;
        }
        if (sum == num) {
            printf("\n%d", num);
        }
    }
}
```

5. Print fibonacci series?(optional)

```c
//Print fibonacci series?
#include <stdio.h>
int main()
{
  int i, n;
  int t1 = 0, t2 = 1;
  int nextTerm = t1 + t2;

  printf("Enter the number of terms: ");
  scanf("%d", &n);

  printf("Fibonacci Series: %d, %d, ", t1, t2);
```

```c
  for (i = 3; i <= n; ++i) {
    printf("%d, ", nextTerm);
    t1 = t2;
    t2 = nextTerm;
    nextTerm = t1 + t2;
  }

}
```