

#### Assignment 4

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

```
#include<stdio.h>

void main()
{
    int num,originalnum,sum,digit,n;
    printf("Enter the value: ");
    scanf("%d", &n);
    printf("Armstrong numbers from 1 to %d are:\n", n);
    for (int num = 1; num <= n; num++)
    {
        sum=0;
        originalnum=num;
        while(originalnum !=0)
        {
            digit=originalnum%10;
            sum+=digit*digit*digit;
            originalnum/=10;
        }
        if (sum==num)
            printf("%d",num);
    }
}
```

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

```
#include<stdio.h>

void main()
{
    int num,i,n,flag;
    printf("Enter the value: ");
    scanf("%d", &n);
```

```

printf("Prime numbers between 1 to %d are:\n", n);
for(num=2;num<=n;num++)
{
flag=0;
for(i=2;i<=num/2;i++)
{
if(num%i==0)
{
flag=1;
break;
}
}
if(flag==0)
printf("%d",num);
}
}

```

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

```

#include <stdio.h>

void main()
{
int i, j, end, sum;
printf("Enter a value: ");
scanf("%d", &end);
printf("All Perfect numbers between 1 to %d:\n", end);

for(i=1; i<=end; i++)
{
sum = 0;
for(j=1; j<i; j++)
{

```

```
if(i % j == 0)
{
sum += j;
}
}
if(sum == i)
{
printf("%d, ", i);
}
}
}
```

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

```
#include<stdio.h>
void main()
{
int i, j, cur, lastDigit, end;
long long fact, sum;
printf("Enter a value: ");
scanf("%d", &end);
printf("All Strong numbers between 1 to %d are:\n", end);
for(i=1; i<=end; i++)
{
cur = i;
sum = 0;
while(cur > 0)
{
fact = 1;
lastDigit = cur % 10;
for( j=1; j<=lastDigit; j++)
{
```

```
fact = fact * j;
}
sum += fact;
cur /= 10;
}
if(sum == i)
{
printf("%d, ", i);
}
}
}
```

**//5. Print fibonacci series?**

```
#include<stdio.h>
void 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);
for (i = 3; i <= n; ++i)
{
printf("%d, ", nextTerm);
t1 = t2;
t2 = nextTerm;
nextTerm = t1 + t2;
}
}
```