

Assignment No.4

Q1.Print Armstrong number in the the given range 1 to n?

Code:-

```
//Print armstrong number in the the given range 1 to n?  
#include<stdio.h>  
int main(){  
    int rem,r1,num1,num2;  
    int digit,t,count;  
    int sum=0,num;  
  
    printf("Enter two numbers :");  
    scanf("%d%d",&num1,&num2);  
  
    num=num1;  
    for(;num<=num2;num++){ //sequencely flow number  
  
        //printf("%d",num);  
        num1=num;  
        digit=1;  
  
        for(;num1>9;num1=num1/10){ //use for finding how many digit in  
number  
            digit++;  
            //printf("no of digit : %d \n",digit);  
        }  
  
        num1=num;  
        count=digit;  
  
        for(;digit>0;digit--){  
            t=count;  
            rem=num1%10;           //finding remainder  
            //      printf("remainder is %d \n",rem);  
  
            r1=rem;
```

```
for(;t>1;t--) { //to calculate power of n(digit number) remainder
    rem=r1*rem;
    //      printf("remainder is %d \n",rem);
    }
    sum=sum+rem;
    num1=num1/10;
}
if(sum == num){

    printf(" %d is the armstrong number which \n",num);

    printf("sum is %d \n",sum);

    //num1=num;
}
sum=0;
}
}
```

Q2.Print prime number in the given range 1 to n?

Code:-

```
#include<stdio.h>
void main(){
    int n1,n2;
    printf("Enter two numbers :");
    scanf("%d%d",&n1,&n2);
    for(;n1<=n2;n1++){
        //printf("%d",n1);
        if(n1<=7){
            if(n1==2||n1==3||n1==5||n1==7){
                printf("%d \n",n1);
            }
        }
        else{
            if(n1%2==0||n1%3==0||n1%5==0||n1%7==0){
                //printf("%d",n1);
            }
            else{
                printf("%d \n",n1);
            }
        }
    }
}
```

Q3.check perfect number in the given range 1 to n?

Code:-

```
#include<stdio.h>
void main(){
    int num1,num2,count,sum;

    printf("Enter two numbers :");
    scanf("%d%d",&num1,&num2);

    for(;num1<=num2;num1++){
        sum=0;
        //printf("number is %d \n",num1);
        //printf(" sum is %d \n",sum);
        count=1;
        for(;num1>count;count++){
            if(num1%count==0){

                //printf("count is %d \n",count);
                sum=sum+count;
                //printf("sum is %d \n",sum);
            }
        }
        //printf("sum is %d \n",sum);
    }
    if(sum==num1){

        printf("perfect num is %d ",num1);
        printf("their sum is %d \n",sum);
    }
}
```

Q4.check strong number in the given range 1 to n?

Code:-

```
//check strong number in the given range 1 to n
#include<stdio.h>
void main(){
    int num1,num2,no,rem,r1,b=0,fact,str=0;

    printf("Enter two number :");
    scanf("%d%d",&num1,&num2);

    for(;num1<=num2;num1++){
        no=num1;

        for(;num1!=0;num1=num1/10){

            fact=1;
            rem=num1%10;
            r1=rem;

            for(;r1!=b;r1--){
                fact=fact*r1;

            }
            str=str+fact;
        }

        if(str==no){
            printf("Strong of %d number is : %d \n",no,str);
        }
        num1=no;
        b=0;
        str=0;
    }
}
```

Q5.Print fibonacci series?(optional)

Code:-

```
//Print fibonacci series?(optional)
```

```
#include<stdio.h>
void main(){
    int num,prv=0,post=1,count,temp;
    printf("How many number you want to print :");
    scanf("%d",&num);
    //printf(" 0 \n");
    for(count=1;count<=num;count++)
    {
        temp=prv;
        prv=post;
        post=temp;
        printf(" %d \n",post);
        post=prv+post;
    }
}
```