//Q1Calculate the armstrong numbers in a given range

```c
#include<stdio.h>
void main(){
        int i ,range;

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

        int temp,count,rem,m,sum;
        int tempcount;

        for (i=1;i<=range;i++)
        {
                temp=i;

                count=0;
        while(temp>0){

                count++;
                temp=temp/10;
        }

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

                rem = temp%10;
                tempcount=count;
```

```c
                    m=1;
                    while(tempcount>0){

                            m = m*rem;
                            tempcount--;
                    }

                    sum = sum+m;
                    temp=temp/10;
            }

        if(sum==i){
                printf("\n%d",i);
        }
    }
}


// 2. Print prime number in the given range 1 to n?
#include<stdio.h>

void main(){
    int a, b, num, i, flag;

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

    printf("The prime numbers between the given range are:");
    for(num = a; num <= b; num++) {
        flag = 0;
```

```c
        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  range, num, sum,i;


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


    for (num = 1; num <= range; num++) {
        sum = 0;
```

```c
        for (i = 1; i <= num/2; i++) {

          if (num % i == 0) {

            sum = sum+ i;

          }

        }



        if (sum == num ) {

          printf("%d ", num);

        }

    }


    printf("\n");
}
```

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

```c
#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;
```

```c
        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);

        }

    }

}
```