```
/*
Q 1. Write a C program to find LCM of two numbers.
*/
#include<stdio.h>
void main()
{
	int n1,n2,LCM,i,j,p,max;
	printf("Enter First number = ");
	scanf("%d",&n1);
	printf("Enter Second number = ");
	scanf("%d",&n2);
	max=n1>n2?n1:n2;
	for(i=max;   ;i++)
	{
		if(i%n1==0 && i%n2==0)
		{
			LCM=i;
			break;
		}
	}
	/*
	LCM=1;
	i=2;
	while(n1 != 1 || n2 != 1)
	{
                                                        //printf("\nn1= %d\nn2=
%d\n",n1,n2);
```

```
            p=0;
            for(j=2; j <= i/2 ;j++)
            {
                  if(i%j == 0 )
                  {
                        p=1;
                        break;
                  }
            }
                                                      //printf("\nPrime Number
= %d\n",i);
            if(p == 0)
            {
                  lab2:
                  if(n1%i == 0 || n2%i == 0)
                  {
                        LCM=LCM*i;
                        if(n1%i == 0)
                              n1=n1/i;
                        if(n2%i == 0)
                              n2=n2/i;
                  }
            }
                                                      //printf("\nn1= %d\nn2=
%d\n",n1,n2);
            if(n1%i != 0 && n2%i != 0)
                  i++;
```

```
            else
                goto lab2;
        }
        */
        printf("LCM = %d",LCM);
}
```

```
/*
Q 2. Write a C program to check whether a number is Prime number or not.
*/

#include<stdio.h>

void main()
{
	int n,i,prime,flag=0;
	printf("Enter numbr n = ");
	scanf("%d",&n);
	i=2;
	while(i <= n/2)
	{
		prime=n%i;
		if( prime == 0 )
		{
			printf("Number is Not Prime Number.");
			flag=1;
			break;
		}
		i++;
	}
	if(flag==0)
		printf("Number is Prime Number.");

	/*
```

```
        int i,count=0;
        for(i=1;i<=n;i++)
        {
                if(n%i==0)
                        count++;
        }
        if(count == 2)
                printf("Prime");
        else
                printf("Not prime");
        */
}
```

```
/*
Q 3. Write a C program to print all Prime numbers between 1 to n.
*/
#include<stdio.h>

void main()
{
	int n,i,prime,j,flag;
	printf("Enter numbr n = ");
	scanf("%d",&n);
	i=2;
	printf("Prime numbers = ");
	for(i=2 ;i<=n;i++)
	{
		flag=0;
		for(j=2;j<=i/2;j++)
		{
			prime=i%j;
			if(prime == 0)
				flag=1;
		}
		if(flag==0)
			printf(" %d  ",i);
	}
}
```

```
/*
Q 4. Write a C program to find sum of all prime numbers between 1 to n.
*/
#include<stdio.h>

void main()
{
	int n,i,prime,j,flag,sum;
	printf("Enter numbr n = ");
	scanf("%d",&n);
	i=2;
	sum=0;
	printf("Prime numbers = ");
	for(i=2 ;i<=n;i++)
	{
		flag=0;
		for(j=2;j<=i/2;j++)
		{
			prime=i%j;
			if(prime == 0)
			{
				flag=1;
				break;
			}
		}
		if(flag==0)
		{
```

```
                printf(" %d ",i);
                sum=sum+i;
            }
        }
        printf("\nSum = %d",sum);
}
```

```
/*
Q 5. Write a C program to find all prime factors of a number.
*/
#include<stdio.h>
void main()
{
	int n,i,j,p,flag;
	printf("Enter n = ");
	scanf("%d",&n);
	printf("Prime Factors = ");
	for(j=2; j <= n ; j++)
	{
		flag=0;
		i=2;
		while(i <= j/2)
		{
			p=j%i;
			if(p == 0)
			{
				flag=1;
				break;
			}
			i++;
		}
		if(flag == 0)
		{
			if(( n % j ) == 0)
```

```
                printf(" %d  ,",j);
            }
        }
}
```

```
/*
Q 6. Write a C program to check whether a number is Armstrong number or Not.
*/
#include<stdio.h>
void main()
{
	int n,n1,n2,i,j,digit,r,sum,pro;
	printf("Enter n = ");
	scanf("%d",&n);
	n1=n;
	n2=n;
	i=0;
	sum=0;
	while(n1 > 0)
	{
		n1=n1/10;
		i++;
	}
	while(n2 > 0)
	{
		r=n2%10;
		n2=n2/10;
		pro=1;
		for(j=1; j <= i ;j++)
		{
			pro=pro*r;
		}
```

```
        sum=sum+pro;
    }
    if(sum == n)
        printf("Number is Armstrong.");
    else
        printf("Number is Not Armstrong.");
}
```

```
/*
Q 7. Write a C program to print all Armstrong numbers between 1 to n.
*/
#include<stdio.h>
void main()
{
	int n,n1,n2,i,j,k,r,pro,sum;
	printf("Enter n = ");
	scanf("%d",&n);
	printf("Armstrong Numbers = ");
	for(i=0; i <= n ;i++)
	{
		n1=i;
		n2=i;
		sum=0;
		j=0;
		while(n1 > 0)
		{
			j++;
			n1=n1/10;
		}
		while(n2>0)
		{
			r=n2%10;
			n2=n2/10;
			pro=1;
			k=1;
```

```
                while(k <= j)
                {
                        pro=pro*r;
                        k++;
                }
                sum=sum+pro;
        }
        if(sum == i)
                printf(" %d,",i);
    }
}
```

```
/*
Q 8. Write a C program to check whether a number is Perfect number or Not.
*/
#include<stdio.h>
void main()
{
	int n,i,sum;
	printf("Enter n = ");
	scanf("%d",&n);
	sum=0;
	for(i=1 ; i <= n/2 ; i++)
	{
		if(n%i == 0)
			sum=sum+i;
	}
	if(sum == n)
		printf("Number is a Perfect Number.");
	else
		printf("Number is a Not Perfect Number.");
}
```

```
/*
Q 9. Write a C program to print all Perfect numbers between 1 to n.
*/
#include<stdio.h>
void main()
{
	int n,i,j,sum;
	printf("Enter n = ");
	scanf("%d",&n);
	printf("Perfect Number = ");
	for(j=1; j <= n ; j++)
	{
		sum=0;
		for(i=1 ; i <= j/2 ; i++)
		{
			if(j%i == 0)
				sum=sum+i;
		}
		if(sum == j)
			printf("  %d,",j);
	}
}
```

```
/*
Q 10. Write a C program to check whether a number is Strong number or not.
*/
#include<stdio.h>
void main()
{
	int n,n1,sum,r,i,fact;
	printf("Enter n = ");
	scanf("%d",&n);
	n1=n;
	sum=0;
	while(n1>0)
	{
		r=n1%10;
		n1=n1/10;
		fact=1;
		for(i=2; i <= r ; i++)
		{
			fact=fact*i;
		}
		sum=sum+fact;
	}
	if(sum == n)
		printf("Number is a Strong Number.");
	else
		printf("Number is a Not Strong Number.");
}
```

```
/*
Q 11. Write a C program to print all Strong numbers between 1 to n.
*/
#include<stdio.h>
void main()
{
	int n,i,j,n1,sum,r,fact;
	printf("Enter n = ");
	scanf("%d",&n);
	printf("Strong Numbers = ");
	for(i=1; i <= n ; i++)
	{
		n1=i;
		sum=0;
		for(n1; n1 > 0 ; n1)
		{
			r=n1%10;
			n1=n1/10;
			fact=1;
			j=2;
			while(j <= r)
			{
				fact=fact*j;
				j++;
			}
			sum=sum+fact;
		}
```

```
            if(sum == i)
                printf("  %d,",sum);
        }
}
```

```
/*
Q 12. Write a C program to print Fibonacci series up to n terms.
*/
#include<stdio.h>
void main()
{
	int t,t1,t2,i,n;
	printf("Enter number of terms = ");
	scanf("%d",&n);
	t1=0;
	t2=1;
	printf("Fibonacci series = 0 , 1 ");
	for(i=3; i <= n ;i++)
	{
		t=t1+t2;
		printf(", %d ",t);
		t1=t2;
		t2=t;
	}
}
```