

Q1:-

```
#include<stdio.h>

int lcm(int,int);

int main(){
    int num1,num2;
    printf("Enter two numbers:\n");
    scanf("%d %d",&num1,&num2);
    printf("LCM is %d",lcm(num1,num2));
    return 0;
}

int lcm(int num1 , int num2)
{
    int i;
    for(i=2;i!=0;i++)
        if(i%num1==0 && i%num2==0)
            return i;
}
```

Q2:-

```
#include<stdio.h>

int hcf(int,int);

int main(){
    int num1,num2;
```

```

    printf("Enter two numbers:\n");
    scanf("%d %d",&num1,&num2);
    printf("HCF is %d",hcf(num1,num2));
    return 0;
}

int hcf(int num1 , int num2)
{
    int i;
    num1<num2?(i=num1):(i=num2);
    for(i;i!=0;i--)
        if(num1%i==0 && num2%i==0)
            return i;
}

```

Q3:-

```

#include<stdio.h>
#include<math.h>
int prime(int);
int main()
{
    int num;
    printf("Enter the number:\n");
    scanf("%d",&num);
    if(prime(num)==1)

```

```

        printf("Prime");
    else
        printf("Not a prime");
    return 0;
}

int prime(int num)
{
    int i,s;
    s=sqrt(num);
    for(i=2;i<=s;i++)
    {
        if(num%i==0)
            break;
    }
    if(i>s)
        return 1;
    else
        return 0;
}

```

Q4:-

```

#include<stdio.h>

#include<math.h>

int prime(int);

```

```
int main()
{
    int num;
    printf("Enter a number:\n");
    scanf("%d",&num);
    num=num+1;
    printf("%d",prime(num));
    return 0;
}

int prime(int num)
{
    int i,s;
    while(num)
    {
        s=sqrt(num);
        for(i=2;i<=s;i++)
        {
            if(num%i==0)
                break;
        }
        if(i>s)
            return num;
        else
            num++;
    }
}
```

```
    }  
}
```

Q5:-

```
#include<stdio.h>  
#include<math.h>  
void prime(int);  
int main()  
{  
    int num;  
    printf("Enter a number:\n");  
    scanf("%d",&num);  
    prime(num);  
    return 0;  
}  
void prime(int num)  
{  
    int i=1,p=2,j,s;  
  
    while(i<=num)  
    {  
        s=sqrt(p);  
        for(j=2;j<=s;j++)  
        {
```

```

        if(p%j==0)
            break;
    }
    if(j>s)
    {
        printf("%d ",p);
        i++;
    }
    p++;
}
}

```

Q6:-

```

#include<stdio.h>
#include<math.h>
void prime(int,int);
int main(){
    int num1,num2;
    printf("Enter 2 numbers:\n");
    scanf("%d %d",&num1,&num2);
    prime(num1,num2);
    return 0;
}
void prime(int num1,int num2){

```

```

int p=num1+1,i,s;
for(p;p<num2;p++){
    s=sqrt(p);
    for(i=2;i<=s;i++){
        if(p%i==0)
            break;
    }
    if(i>s)
        printf("%d ",p);
}
}

```

Q7:-

```

#include<stdio.h>

void fabo(int);

int main(){
    int num;
    printf("Enter a number:\n");
    scanf("%d",&num);
    fabo(num);
    return 0;
}

void fabo(int num){
    int a=0,b=1,i,c=0;

```

```

{
    if(num==1)
        printf("%d",a);
    else
        printf("%d %d",a,b);
        for(i=3;i<=num;i++){
            c=a+b;
            a=b;
            b=c;
            printf(" %d",c);
        }
}
}

```

Q8:-

```

#include <stdio.h>

long factorial(int);
void pascal(int);
int main()
{
    int num;

    printf("Enter the number of rows you wish to see in pascal triangle\n");
    scanf("%d", &num);
    pascal(num);
}

```



```

        return 0;
    }
void pascal(int num)
{
    int n,r;
    for (n = 0; n < num; n++) {
        for (r = 0; r <= (num - n - 2); r++)
            printf(" ");
        for (r = 0; r <= n; r++)
            printf("%ld ", factorial(n) / (factorial(r) * factorial(n - r)));
        printf("\n");
    }
}
long factorial(int num) {
    int i;
    long result = 1;
    for (i = 1; i <= num; i++)
        result = result * i;
    return result;
}

```

Q9:-

```
#include<stdio.h>
```

```
int square(int);
```

```
int main()
{
    int num;
    printf("Enter a number:\n");
    scanf("%d",&num);
    printf("The square of %d is %d",num,square(num));
    return 0;
}
```

```
int square(int num)
{
    return(num*num);
}
```

Q10:-

```
#include<stdio.h>
int fact(int);
int main()
{
    int num=5,sum=0;
    while(num)
    {
        sum=sum+fact(num)/num;
        num--;
    }
```

```
        printf("%d",sum);  
    }  
    int fact(int num)  
    {  
        int i;  
        for(i=num-1;i!=0;i--)  
            num=num*i;  
        return num;  
    }
```