

```
/*
Title- 1. Write a C++ program to find power of any number  $x^y$ 
Author- Bhakare Mahesh Santosh
ID- 492
Batch- TechnOrbit(PPA-8)
*/

#include<iostream>
int main()
{
    int i,x,y,power=1;
    std::cout<<"Please Enter X: ";
    std::cin>>x;
    std::cout<<"Please Enter Power Y: ";
    std::cin>>y;
    for(i=0;i<y;i++)
    {
        power*=x;
    }
    std::cout<<x<<"^"<<y<<" = "<<power<<std::endl;
    return 0;
}

/*
Title- 2. Write a C++ program to check valid email id using character array.
Author- Bhakare Mahesh Santosh
ID- 492
Batch- TechnOrbit(PPA-8)
*/

#include<iostream>

int main()
{
    char arr[100],i,flag=0;
    std::cout<<"Enter EmailID: ";
    fgets(arr,100,stdin);
    for(i=0;arr[i]!='\0';i++)
    {
        if(arr[i] == '@')
        {
            flag = 1;
            break;
        }
    }
    if(flag == 1)
    {
        std::cout<<"Valid Email ID.....!"<<std::endl;
    }
    else
    {
        std::cout<<"Invalid Email ID.....!"<<std::endl;
    }
    return 0;
}

/*
Title- 3. Write a C++ program to convert days into years, weeks and days
Author- Bhakare Mahesh Santosh
ID- 492
Batch- TechnOrbit(PPA-8)
*/
```

```
#include<iostream>
```

```

int main()
{
    int days,year,weeks,day;
    std::cout<<"Enter Days: ";
    std::cin>>days;
    year = days/365;
    weeks = (days-(year*365))/7;
    day = ((days-(year*365)) + (weeks*7));
    std::cout<<"Years: "<<year<<" Weeks: "<<weeks<<" Days: "<<day<<std::endl;
    return 0;
}

/*
Title- 4.Write a C++ program Fibonacci number How to find out if a given number is a
Fibonacci number or not.
Author- Bhakare Mahesh Santosh
ID- 492
Batch- TechnOrbit(PPA-8)
*/

#include<iostream>
int main()
{
    int num,i=0,j=1,k,flag=0;
    std::cout<<"Enter Number to Find in Febonicii Series: ";
    std::cin>>num;
    if(num==0)
    {
        flag =1;
    }
    else
    {
        while(1)
        {
            k=i;
            i=i+j;
            if(i <= num)
            {
                if(i == num)
                {
                    flag = 1;
                    break;
                }
            }
            else
            {
                break;
            }
            j=k;
        }
    }
    if(flag == 1)
    {
        std::cout<<"Valid.....!"<<std::endl;
    }
    else
    {
        std::cout<<"Invalid.....!"<<std::endl;
    }
    return 0;
}

/*

```

Title- 5. Write a C++ program to find the last occurrence position of the number in the given array

Author- Bhakare Mahesh Santosh

ID- 492

Batch- TechnOrbit(PPA-8)

*/

```
#include<iostream>
```

```
int main()
```

```
{
```

```
    int arr[10], i, pos, num;
```

```
    std::cout<<"Enter array Elements: ";
```

```
    for(i=0; i<10; i++)
```

```
    {
```

```
        std::cin>>arr[i];
```

```
    }
```

```
    std::cout<<"Enter number to find last occurrence: ";
```

```
    std::cin>>num;
```

```
    for(i=0; i<10; i++)
```

```
    {
```

```
        if(arr[i]==num)
```

```
        {
```

```
            pos = i;
```

```
        }
```

```
    }
```

```
    std::cout<<"Last occurrence position of number is: "<<pos<<std::endl;
```

```
    return 0;
```

```
}
```