

C++ PROGRAMS

Decision Making and Loops

C++ PROGRAM to find whether the given number is even or odd

```
#include<iostream>
using namespace std;
int main() {
    int n;

    cout << "Enter an integer: ";
    cin >> n;

    if ( n % 2 == 0)
        cout << n << " is even.";
    else
        cout << n << " is odd.";

    return 0;
}
```

C++ Program to Check Leap Year or Not

```
#include<iostream>
using namespace std;
int main() {
    int year;
    cout<<"Enter the Year: ";
    cin>>year;
    if((year%4==0) && (year%100!=0))
        cout<<"\nIt is a Leap Year";
    else if(year%400==0)
        cout<<"\nIt is a Leap Year";
    else
        cout<<"\nIt is not a Leap Year" << endl;

    return 0;
}
```

C++ Program to finds largest of three numbers

```
#include<iostream>
using namespace std;
int main() {
    float n1, n2, n3;

    cout << "Enter three numbers: ";
    cin >> n1 >> n2 >> n3;

    if(n1 >= n2 && n1 >= n3)
        cout << "Largest number: " << n1;
}
```

```

        else if(n2 >= n1 && n2 >= n3)
            cout << "Largest number: " << n2;

        else
            cout << "Largest number: " << n3;

    return 0;
}

```

C++ Program to Make a Simple Calculator to Add, Subtract, Multiply or Divide Using switch...case

```

#include<iostream>
using namespace std;
int main() {
    char op;
    double n1,n2;
    cout<<"Enter the Operator ( +, -, *, /)";
    cin>>op;
    cout<<"Enter two numbers";
    cin>>n1>>n2;
    switch(op)
    {
        case '+':
            cout<< n1 << " + " << n2<< " =" <<(n1+n2);
            break;
        case '-':
            cout<< n1 << " - " << n2 << "="<<(n1-n2);
            break;
        case '*':
            cout<< n1 << " * " << n2 << "= " <<(n1*n2);
            break;
        case '/':
            if( n2!=0.0)
                cout<< n1<<" / " << n2<< " = "<<(n1/n2);
            else
                cout<< "its divide by zero situation";
            break;
        default:
            cout<< op <<" is an invalid operator";
    }
    return 0;
}

```

C++ Program to Calculate Sum of Natural Numbers

```

#include<iostream>
using namespace std;
int main()
{
    int n, sum = 0;

    cout << "Enter a positive integer: ";
    cin >> n;
}

```

```

        for (int i = 1; i <= n; i++)
        {
            sum += i;
        }

        cout << "Sum = " << sum;

    return 0;
}

```

C++ Program to Find Factorial of Number.

```

#include<iostream>
using namespace std;
int main()
{
    int i,num,fact;

    fact=1;

    cout<<"/n Enter a Number:";

    cin>>num;

    for(i=1;i<=num;i++)

    fact=fact*i;

    cout<<" factorial of "<< num<<"is"<< fact;

    return 0;
}

```

C++ Program to Generate Multiplication Table

```

#include<iostream>
using namespace std;
int main()
{
    int n;

    cout << "Enter a positive integer: ";
    cin >> n;

    for (int i = 1; i <= 10; i++)
    {
        cout << n << " * " << i << " = " << n * i << endl;
    }

    return 0;
}

```