PROGRAMMING FUNDAMENTALS

Topic No: 1 MARKS & GRADES

Program to find the grade of student according to there numbers

```
#include <iostream>
using namespace std;

int main()
{
   int marks;
   cout<<"Enter your marks: "<<endl;
   cin>>marks;
   if(marks<0 || marks>100){
     cout<<"Invalid marks. "<<endl;
   }
   else if(marks >= 90){
     cout<<"Your grade is ( A ) ";
   }
   else if(marks >= 80){
     cout<<"Your grade is ( B ) ";
   }
```

```
    else if(marks >= 70){
      cout<<"Your grade is ( C ) ";
    }
    else if(marks >= 60){
      cout<<"Your grade is ( D ) ";
    }
    else if(marks >= 50){
      cout<<"Your grade is ( E ) ";
    }
    else{
      cout<<"Your are fail: ";
    }
    return 0;
}
```

TOPIC NO:2 FACTORIAL AND FIBONACCHI SEQUENCE

Program for finding factorial of number

```
#include <iostream>
using namespace std;
```

```
int main() {
    int n, fact = 1;
    cout << "Enter a number: ";
    cin >> n;
    for (int i = 1; i <= n; ++i) {
        fact *= i;
    }
    cout << "Factorial of " << n << " is " << fact << endl;
    return 0;
}
```

OR

```
#include <iostream>
using namespace std;

int factorial(int n){
  if(n == 0 || n== 1){
    return n;
  }
  else{
    return n*factorial(n-1);
  }
```

```
}

int main()
{
   int num;
   cout<<"Enter your number: "<<endl;
   cin>>num;

   cout<<"The factorial of "<<num<<" is
"<<factorial(num);
   return 0;
}
```

Program for finding Fibonacci sequence of number

```
#include <iostream>
using namespace std;

int fibonacchi(int n){
```

```
  if(n<=1){
    return n;
    }
    else{
    return fibonacchi(n-1) + fibonacchi(n-2);
  }
}
int main(){
  int n;
  cout<<"Enter your number: "<<endl;
  cin>>n;
  cout<<"Your fibonacchi sequence upto "<<n<<" term is "<<endl;
  for(int i=0; i<n; i++){
    cout<<fibonacchi(i)<<" ";
  }

  return 0;
}
```

TOPIC NO:3 MULTPLE TABLE OF ANY NUMBER UPTO 10

Program to find multiple table of any number upto 10

```
#include<iostream>
using namespace std;

int main(){
  int num;
  cout<<"Enter your specific number: "<<endl;
  cin>>num;

  cout<<"The multiplication tables of "<<num<<" is "
<<endl;
  for(int i=0; i<=10; i++){
    cout<<num<<" x "<<i<<" = "<<num * i<<endl;
  }


  return 0;
}
```