

C++ Module

-Assignment 2(240850320001)

1)

```
#include<iostream>

using namespace std;

bool checkPrime(int);

int main()
{
    int num;
    cout<<"Enter any number : ";
    cin>>num;
    bool is_Prime= checkPrime(num);
    if(is_Prime){
        cout<<"The number "<<num<<" is Prime."<<endl;
    }
    else{
        cout<<"The number "<<num<<" is not Prime"<<endl;
    }
}

bool checkPrime(int x)
{
    if(a==1 || a==0){
        return false;
    }
    for(int i=2;i<=(x/2);i++)
    {
```

```

        if((x%i)==0){
            return false;
        }
    }
    return true;
}

```

Enter any number : 7

The number 7 is Prime.

=====

2)

```
#include<iostream>
```

```
using namespace std;
```

```
bool checkPrime(int);
```

```
int main()
```

```
{
```

```
    int num;
```

```
    cout<<"Enter any number : ";
```

```
    cin>>num;
```

```
    cout<<"The first "<<num<<" Prime numbers are : "<<endl;
```

```
    int count=0;
```

```
    int n=1;
```

```
    while(n>=1){
```

```
        bool is_Prime= checkPrime(n);
```

```
        if(is_Prime){
```

```
            cout<<n<<" ";
```

```
            count++;
```

```

    }
    if(count==num){
        break;
    }
    n++;
}

```

```

}
bool checkPrime(int x)
{
    if(x==1 || x==0){
        return false;
    }
    for(int i=2;i<=(x/2);i++)
    {
        if((x%i)==0){
            return false;
        }
    }
    return true;
}

```

Enter any number : 5

The first 5 Prime numbers are :

2 3 5 7 11

=====

3)

#include<iostream>

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int n=26;
```

```
    cout<<"The Pyramid is as below: "<<endl;
```

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

```
        char ch='A';
```

```
        for(int j=1;j<=i;j++){
```

```
            cout<<ch++;
```

```
        }
```

```
        cout<<endl;
```

```
    }
```

```
    return 0;
```

```
}
```

A

AB

ABC

ABCD

ABCDE

ABCDEF

ABCDEFG

ABCDEFGH

ABCDEFGHI

ABCDEFGHIJ

ABCDEFGHIJK

ABCDEFGHIJKL

ABCDEFGHIJKLM
ABCDEFGHIJKLMN
ABCDEFGHIJKLMNO
ABCDEFGHIJKLMNOP
ABCDEFGHIJKLMNOPQ
ABCDEFGHIJKLMNOPQR
ABCDEFGHIJKLMNOPQRS
ABCDEFGHIJKLMNOPQRST
ABCDEFGHIJKLMNOPQRSTU
ABCDEFGHIJKLMNOPQRSTUV
ABCDEFGHIJKLMNOPQRSTUVW
ABCDEFGHIJKLMNOPQRSTUVWX
ABCDEFGHIJKLMNOPQRSTUVWXY
ABCDEFGHIJKLMNOPQRSTUVWXYZ

=====

4)
`#include<iostream>`
`#include<cstdlib>`
`using namespace std;`
`int add(int,int);`
`int sub(int,int);`
`int mul(int,int);`
`float divi(int,int);`
`int main()`
`{`
 `int a,b,c,n;`
 `float d;`
`cout<<"Enter the First Number: ";`
`cin>>a;`

```
cout<<"Enter the Second Number: ";
cin>>b;
cout<<endl;
cout<<"Enter the operation you want to perform:"<<endl;
cout<<"1.Additon"<<endl;
cout<<"2.Substraction"<<endl;
cout<<"3.Multiplication"<<endl;
cout<<"4.Division"<<endl;
cout<<"5.Exit"<<endl;
cin>>n;
switch(n)
{
    case 1:
        c=add(a,b);
        cout<<"The Addition of "<<a<<" and "<<b<<" is : "<<c<<endl;
        break;
    case 2:
        c=sub(a,b);
        cout<<"The Substraction of "<<a<<" and "<<b<<" is : "<<c<<endl;
        break;
    case 3:
        c=mul(a,b);
        cout<<"The Multiplication of "<<a<<" and "<<b<<" is : "<<c<<endl;
        break;
    case 4:
        d=divi(a,b);
        cout<<"The Division of "<<a<<" and "<<d<<" is : "<<d<<endl;
        break;
    case 5:
        exit(0);
```

```

}
return 0;
}
int add(int x,int y)
{
    return x+y;
}
int sub(int x,int y)
{
    return x-y;
}
int mul(int x,int y)
{
    return x*y;
}
float divi(int x, int y)
{
    return static_cast<float>(x)/y;
}

```

=====

```

5)
#include<iostream>
using namespace std;

int main()
{
    int n;
    cout<<"Enter any number: ";
    cin>>n;
    cout<<endl;
}

```

```
for(int i=1;i<=n;i++){  
    int num=1;  
    for(int j=1;j<=i;j++){  
        cout<<num++;  
    }  
    cout<<endl;  
}  
return 0;  
  
}
```

Enter any number: 5

1

12

123

1234

12345