ASSIGNMENT - 2(240850320010)

Q.1

```
#include<iostream>
#include<cmath>
using namespace std;
int main(){
 int n ;
 cout<<"Enter the number :";
 cin>>n;
 bool checkPrime(n);
}

bool checkPrime(int n) {
    if (n <= 1) {
        return false;
    }
    if (n == 2) { // 2 is a prime number
        return true;
    }
    if (n % 2 == 0) { // Even number greater than 2 is not
prime
        return false;
    }
    // Check odd number1s from 3 up to sqrt(n)
    for (int i = 3; i <= sqrt(n); i += 2) {
        if (n % i == 0) {
            return false;
        }
    }
    return true;
}
```

==========
==========
=
Q.2

```
#include <iostream>
#include <cmath>

using namespace std;

bool checkPrime(int);
void generatePrime(int);

int main(){
 int n1;
       cout <<"enter the number :" ;
    cin >> n1;

 generatePrime(n1);
}

void generatePrime(int n1){
   if(n1<2){
      cout<<"There are no prime numbers less than
2"<<endl;
   }
   for(int i=2;i<=n1;i++){
      if(checkPrime(i)){
         cout<<i<<endl;
      }
   }
   cout<<endl;

}
```

```
bool checkPrime(int n) {
   if (n <= 1) {
      return false;
   }
   if (n == 2) { // 2 is a prime number
      return true;
   }
   if (n % 2 == 0) { // Even number greater than 2 is not
prime
      return false;
   }
   // Check odd number1s from 3 up to sqrt(n)
   for (int i = 3; i <= sqrt(n); i += 2) {
      if (n % i == 0) {
         return false;
      }
   }
   return true;
}
```

==========
==========
==

Q.3

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

int main() {
 int n;
 cout<<"Enter the number : " ;
 cin>>n;
```

```
 for(int i=0;i<26;i++){
     char ch = 'A';
  for(int j=0;j<i;j++){
   cout<<ch++;
  }
 cout<<endl;
 }
 return 0;

}
```

==========
==========
==

Q.4

1. Add
2. Sub
3. Mul
4. Div
5. Exit

accept the menu option and numbers form user.

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

int main() {
    int a,b,n;
    cout<<"Enter the number 1 :";
    cin>>a;
    cout<<"Enter the number 2:";
    cin>>b;
    while(true){
        cout<<"Enter the operation Number to
```

```
perform :"<<endl;
        cout<<"1. Addition"<<endl;
        cout<<"2. Subtraction"<<endl;
        cout<<"3. Multiplication"<<endl;
        cout<<"4. Division"<<endl;
        cout<<"5. Exit the program"<<endl;

        cout<<"Enter the number:";
        cin>>n;

        if(n==5){
           cout<<"Exiting the program"<<endl;
           break;
        }

        switch(n){
           case  1:
              cout<<"Result :"<< " "<<a+b<<endl;
              break;
           case 2:
              cout<<"Result :"<< " "<<a-b<<endl;
              break;
           case 3:
              cout<<"Result :"<< " "<<a*b<<endl;
              break;
           case 4:
              cout<<"Result :"<< " "<<a/b<<endl;
              break;
           default:
              cout<<"You have Entered the wrong choice"<<endl;
              break;
        }
        cout<<endl;
    }
==========================================
```

==========
=

Q.5

1
1 2
1 2 3
..... 1.....N
 where N is the level accepted聽as聽input

```
#include <iostream>
using namespace std;
int main(){
 int n ;
 cout<<"Enter the number:";
 cin>>n;
 for(int i=1;i<=n;i++){
    int a = 1;
  for(int j=1;j<=i;j++){
   cout<<a++;
  }
 cout<<endl;
 }
}
```