CPP

Assignment -2

Mohan Krishna Polineni -240850320045

1. Write a program to check whether a number is prime or not.

#include<iostream>

using namespace std;

prime (int a){

int count=0;

for(int i=1;i<a;i++){

if(a%i==0){

count++;

}

}

if(count<2){

cout << "Prime number " << endl;

}

else{

cout << "Not prime number " << endl;

}

}

int main(){

int a;

cout << "Enter the number : " << endl;

cin >> a;

prime(a);

return 0;

}

Enter the number :

5

Prime number

Enter the number :

15

Not prime number

---------------------------------------------------------------------------------------------------------------------------------------

2. Write a program to generate first N prime numbers. Accept N from user.

#include<iostream>

using namespace std;

int prime (int a){

int count=0;

for(int i=1;i<a;i++){

if(a%i==0){

count++;

}

}

if(count<2){

return a;

}

else{

return 0;

}

}

int main(){

int a;

cout << "Enter the number of primes you want : " << endl;

cin >> a;

int count=0;

int i=2;

cout << endl;

while (count < a){

int b=prime(i);

if (b !=0){

cout << b << " " ;

count++;

}

i++;

}

return 0;

}

Enter the number of primes you want :

4

2 3 5 7

3. Write a program to generate following pyramid

A

AB

ABC

..... A..............Z

#include<iostream>

using namespace std;

int main(){

for (int i=0;i<=26;i++){

for (int j=0;j<i;j++){

cout << char(j+65) ;

}

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. Write a menu driven program to perform mathematical operations on two numbers.

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;

cout << "Enter the two number : " << endl;

cin >> a >> b ;

cout << "What operation do u want to perform :" << endl;

cout << "1.Add \n2.Subtract \n3.Multiplication \n4.Division \n5.Exit" << endl;

int n;

cin >> n;

switch (n){

case 1:

cout << "Sum is " << a+b;

break;

case 2:

cout << "Difference is " << a-b;

break;

case 3:

cout << "Product is : " <<a\*b;

break;

case 4:

cout << "Quotient is : " << a/b;

break;

}

}

Enter the two number :

6

4

What operation do u want to perform :

1.Add

2.Subtract

3.Multiplication

4.Division

5.Exit

2

Difference is 2

---------------------------------------------------------------------------------------------------------------------------------------

5. Generate following pyramid , accept the level from the user as input

1

1 2

1 2 3

..... 1................N

where N is the level accepted as input

#include<iostream>

using namespace std;

int main(){

cout << "Enter the number of lines " << endl;

int n;

cin >> n;

for (int i=0;i<=n;i++){

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

cout << j ;

}

cout << endl;

}

}

Enter the number of lines

5

1

12

123

1234

12345