Department of Mechanical Engineering



Fundamental of Programing

Lab Manual # 06

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Section:C

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Lab Manual # 06

Lab Task:

1. Generate the Fibonacci sequence using loops.

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

int main() {
   int n;
   cout << "Enter the number of terms = ";
   cin >> n;

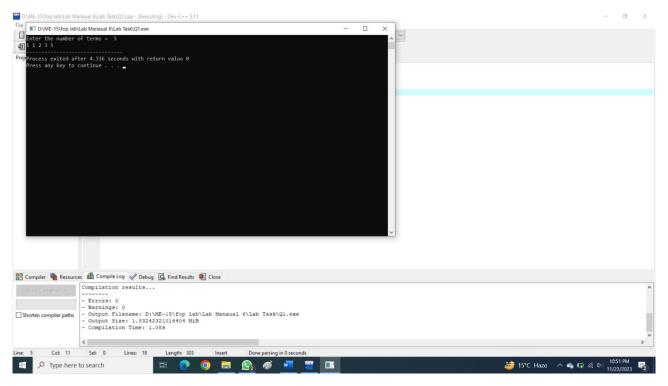
int A = 1, B = 1, C;

for (int i = 1; i <= n; i++) {
   cout << A << " ";
   C = A + B;
   A = B;
   B = C;
}

return 0;
}</pre>
```



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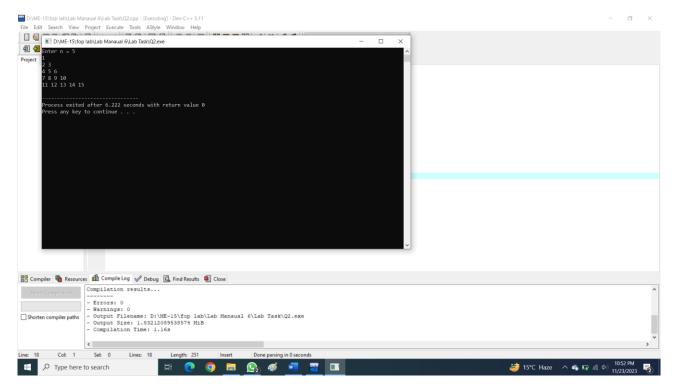
2. Create Floyd triangle with loops.

#include<iostream>
using namespace std;

```
int main()
{
  int n;
  cout << "Enter n = ";
  cin >> n;
  int a = 1;
  for( int i = 1; i <= n; i++){
    for(int j = 1; j <= i; j++){
      cout << a << " ";
      a = a+1;}
    cout << endl;
}
return 0;
}</pre>
```



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Home Task:

#include<iostream>

1. Write a program using break or continue statement that only adds prime numbers from 1 to 50 and display the sum on screen

```
using namespace std;
int main()
{
  int ad = 0;

for ( int i = 2; i <= 50; i++ ) {
  bool flag = true;

for (int j = 2; j <= i/2; j++) {
  if (i % j == 0) {
  flag = false;
  break;
}</pre>
```

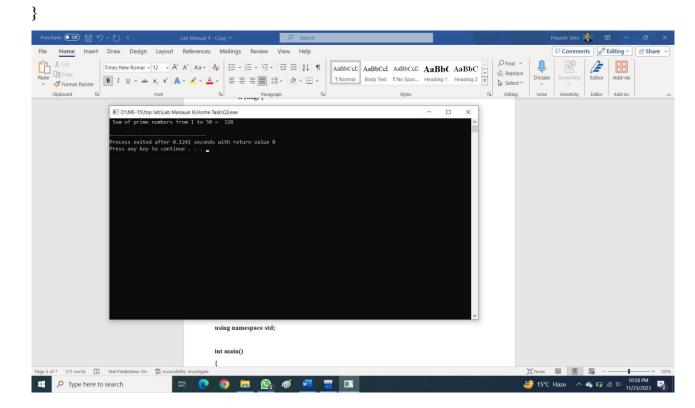


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}
if (flag) {
ad += i;
}

cout << " Sum of prime numbers from 1 to 50 = " << ad << endl;

return 0;



2. Write a program in C++ to create the following pattern.

1

12

123

1234



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12345

Col: 2

```
#include<iostream>
using namespace std;
int main()
int n = 5;
for(int i = 1; i \le n; i++)
for(int j = 1; j \le i; j++)
cout<<j<<" ";
cout << endl;
}
return 0;
آو (globals)
 Project Classes D:\ME-15\fop lab\Lab Manaual 6\Home Task\Q1.exe
                                                                    ocess exited after 0.151 seconds with return value 0 ess any key to continue . . .
Compiler Resources Compile Log 🗸 Debug 🗓 Find Results 🛍 Close
 Abort Compilation Compilation results...
            Shorten compiler paths
```



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3. Write a C++ program to print:22444

```
666666
#include<iostream>
using namespace std;

int main()
{
    int n = 6;
    for( int i = 1; i <= n; i +=1 )
    {
    for( int j = 1; j <= i; j++ )
        if( i%2 == 0){
        cout << i << " ";
    }
    cout<<endl;
}</pre>
```

return 0;

}



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