

MAC 101 Classwork NO 1

Please email this classwork by the end of the class to prof@dpeled.com.

For the following program write:

1. A line by line explanation
2. A synopsis on how does the program work

```
#include <iostream>
```

```
using namespace std;
```

```
int N , FN, F0, FN1 , FN2;
```

```
int main()
```

```
{
```

```
    FN2=0;
```

```
    FN1 = 1;
```

```
    cout<<"Enter the number of the Fibonacci elements" <<"\n";
```

```
    cin >> N;
```

```
    cout << "The Fibonacci sequence is: " <<"\n" << FN2 << " " << FN1 << " " ;
```

```
    while (N>0) {
```

```
    FN = FN1+FN2;
```

```
    cout << FN << " ";
```

```
    N--;
```

```
    FN2 = FN1;
```

```
    FN1=FN;
```

```
    }
```

```
    return 0;
```

```
}
```