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//Page 340 Programming Exercise: Question 2
//In this program we are approximating the value of Pi
//according to the question, we are going to debug and
rearrange the program
```

```
#include <iostream>
#include <iomanip>
```

```
using namespace std;
```

```
// NAME: TEMILOLUWA ADESOLA
// JNUMBER: J00931199
```

```
int main()
{
    double pi;
    long i;
    long n;

    cout << "Enter the value of n: ";
    cin >> n;
    cout << endl;

    for (i = 0; i < n; i++)
    {
        if (i % 2 == 0)
            pi = pi + (1 / (2 * i + 1));
        else
            pi = pi - (1 / (2 * i + 1));
    }

    cout << endl << "pi = " << pi << endl;

    return 0;
}
```