Elementy języka C++: debuggowanie kodu programu używając CodeBlocks.

1. **Ciąg Fibonacciego 2 – znajdź i napraw błąd**

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

int fibonacci (int n){
        if ( n == 0 )
                return 1;
        return fibonacci( n - 1 ) + fibonacci( n - 2 );
}

int main(){
        int n;
        cout << "Enter the number to compute fibonacci for: " << endl;
        cin >> n;
        cout << fibonacci( n );
}
```

2. **Złe potęgowanie – znajdź i napraw błąd**

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

int exponent (int base, int exp){
        int running_value;
        for ( int i = 0; i < exp; i++ )
                running_value *= base;
        return base;
}

int main(){
        int base;
        int exp;
        cout << "Enter a base value: ";
        cin >> base;
        cout << "Enter an exponent: ";
        exponent( exp, base );
}
```

3. **Niekończąca się silnia – znajdź i napraw błąd**

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

int main (){
        int factorial = 1;
        for ( int i = 0; i < 10; i++ )
                factorial *= i;
        int sum = 0;
        for ( int i = 0; i < 10; i++ )
                sum += i;
        int factorial_without_two = 1;
        for ( int i = 0; i < 10; i++ ){
                if ( i == 2 )
                        continue;
                factorial_without_two *= i;
        }
        int sum_without_two = 0;
        for ( int i = 0; i < 10; i++ ){
                if ( i = 2 )
                        continue;
                sum_without_two += i;
        }
}
```

4. **Sumowanie tablicy – znajdź i napraw błąd**

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

int sumValues (int values[], int n){
        int sum;
        for ( int i = 0; i <= n; i++ )
                sum += values[ i ];
        return sum;
}

int main(){
        int size;
        cout << "Enter a size: ";
        cin >> size;
        int values[size];
        int i;
        while ( i < size ){
                cout << "Enter value to add: ";
                cin >> values[ ++i ];
        }
        cout << "Total sum is: " << sumValues( values, size );
}
```

5. **Korzystna lokata? – znajdź i napraw błąd**

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

double computeInterest (double base_val, double rate, int years){
        double final_multiplier;
        for ( int i = 0; i < years; i++ ){
                final_multiplier *= (1 + rate);
        }
        return base_val * final_multiplier;
}

int main (){
        double base_val;
        double rate;
        int years;
        cout << "Enter a base value: ";
        cin >> base_val;
        cout << "Enter an interest rate: ";
        cin >> rate;
        cout << "Enter the number of years to compound: ";
        cin >> years;
        cout << "After " << years << " you will have " <<
        computeInterest( base_val, rate, years ) << " money" << endl;
}
```

Zadań domowych wyjątkowo brak. Kolokwium dziś o godz. 17:00. Powodzenia!