

COMPUTER SCIENCE I

Exercise 2

1. Write a program using a function which prints:

```
#include <stdio.h>

// declaration of function - line ended with semicolon!
void FunView();

// main function
void main()
{
    FunVew();    // call a function FunView
}

// definition of the function FunView
void FunView() // function header: contains return type and name
{              // function starting bracket
    printf( "Hello!");
}              // function ending bracket
```

2. Modify the program by adding three new functions. First function should increment global variable Liczba by 5, e.g.:

```
void IncNumber()
{
    Liczba = Liczba + 5;    // or better: Liczba += 5;
}
```

Second function should decrement variable Liczba by 3. Third function should print current value of variable Liczba. The variable should be declared as global (e.g. after declaration of the function but before the beginning of the main function) and initialize it with 10. Remember about proper declaration of the functions. Inside main function call the function according to the following pattern:

- print value of the variable Liczba;
- increment value of the Liczba by 5 and repeat it three times;
- print value of the variable Liczba;
- decrement value of the Liczba by 3; do it two times;
- increment value of the Liczba by 5;
- print value of the variable Liczba;

3. Create a new program which solves the quadratic equation. Here is a proposition of the program layout:

```
#include <math.h>
#include <stdio.h>

// declaration of functions
void ReadData();
void SolveQuadEq();
void PrintSolution();

// declaration of global variables
double a, b, c, delta, x1, x2;

// main function
void main()
{
    ReadData();
    SolveQuadEq();
    PrintSolution();
}

// definition of other functions
void ReadData()
{
    // fill the function with proper code
}

void SolveQuadEq()
{
    // fill the function with proper code
}

void PrintSolution()
{
    // fill the function with proper code
}
```