Write the working C++ program with the embedded inline Assembly language code. In the Assembly code there must be implemented code to evaluate the functions f_1 and f_2 given in Eqs. 1 and 2 respectively. In the program, the initial values of the independent variable x can be input by keyboard or can be hard-coded while the result of the calculation has to be printed by using the method `printf()`. The output of the results must also include the initial values of thee independent variable x. For example:

```
The value of the function f1 at x = xxx is: f(xxx) = XXX.
```

Where `xxx` and `XXX` stand for the numbers dependent on the imput and the evaluated values of f_1 and f_2

The programs for the functions f_1 and f_2 can be written in separate files (projects).

$$f_1(x) = \begin{cases} 3x + 150, & \text{when } x < 10 \\ floor\left(\frac{(x+4)^2}{15}\right), & \text{when } x = 10 \\ 2x - (2 + x), & \text{when } x > 10 \end{cases} \tag{1}$$

$$f_2(x) = \sum_{i=-5}^{x} 3(i)^2 - i, \text{ when } x \in \{-5, ..., 10\} \subset \mathbb{Z} \tag{2}$$

Where $\mathbb{Z} = (\infty, \ldots, -2, -1, 0, 1, 2, \ldots \infty)$ is set of integers, and $floor$ is the floor function, for example $floor(2.2) = 2$.

The homework must contain

(I) Code of the program that calculates Eq. (1)

(II) Code of the program that calculates Eq. (2)