Imperative Programming

T2.1:

What does the program print if the language uses dynamic scope? Why?

y>0:

print: 1

y<0:

print: 0

because the sentence: x=0 in the function f1, if the y>0, the x has been definition in if conditional sentence, so in function f1 and f2, they are changing the x definited in if conditional sentence. But the x of write(x) is for global variables.

However, if y<= 0, it don’t define x, so x=0 is for global variables.

T2.2:

What does the program print if the language uses static scope and passes parameters by reference. Why?

Print:

5

7

T2.3:

What does the program print if the language uses static scope and passes parameters by value. Why?

Print:

6

2

T2.4

What does the program print if the language uses static scope and passes parameters by name. Why?

Print:

6

4