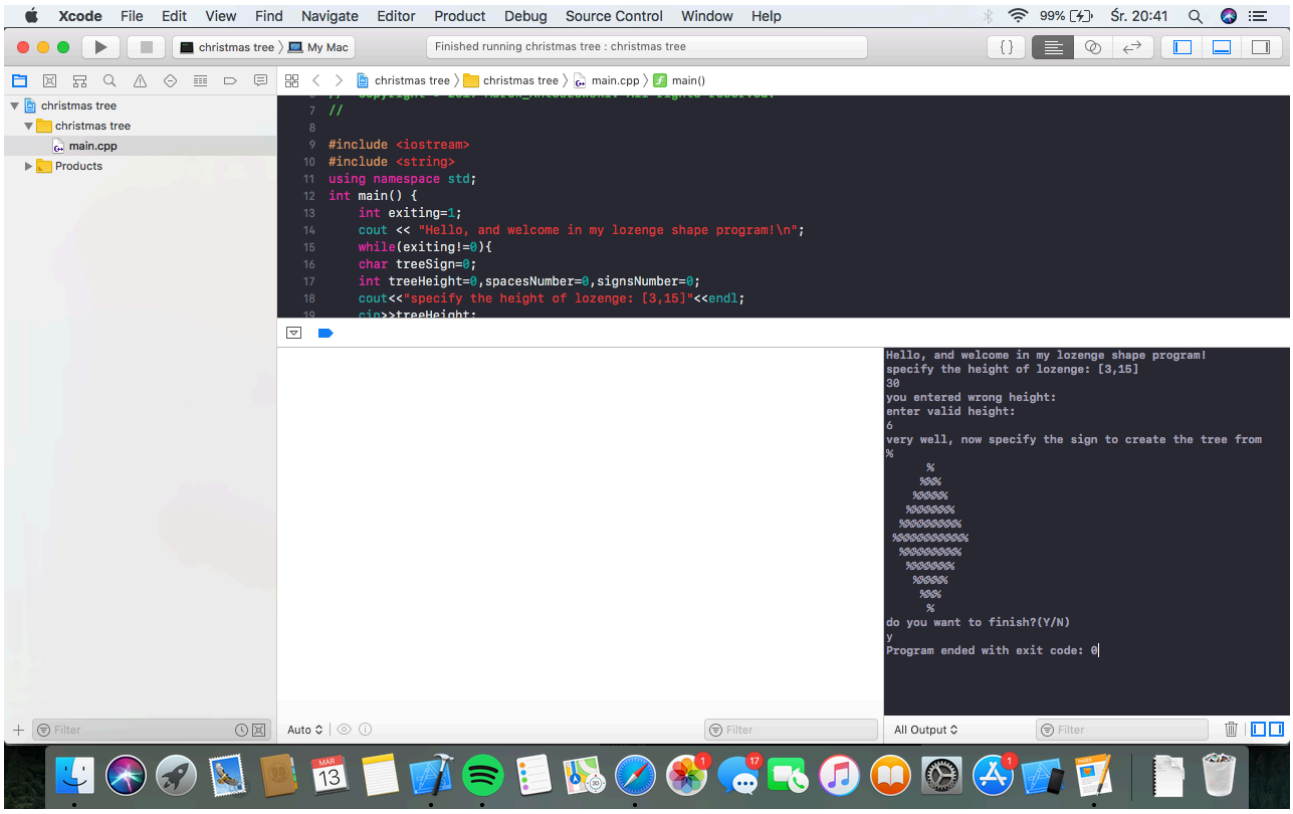
LAB 1 MAREK ANTOSZEWSKI 249113
Task1.

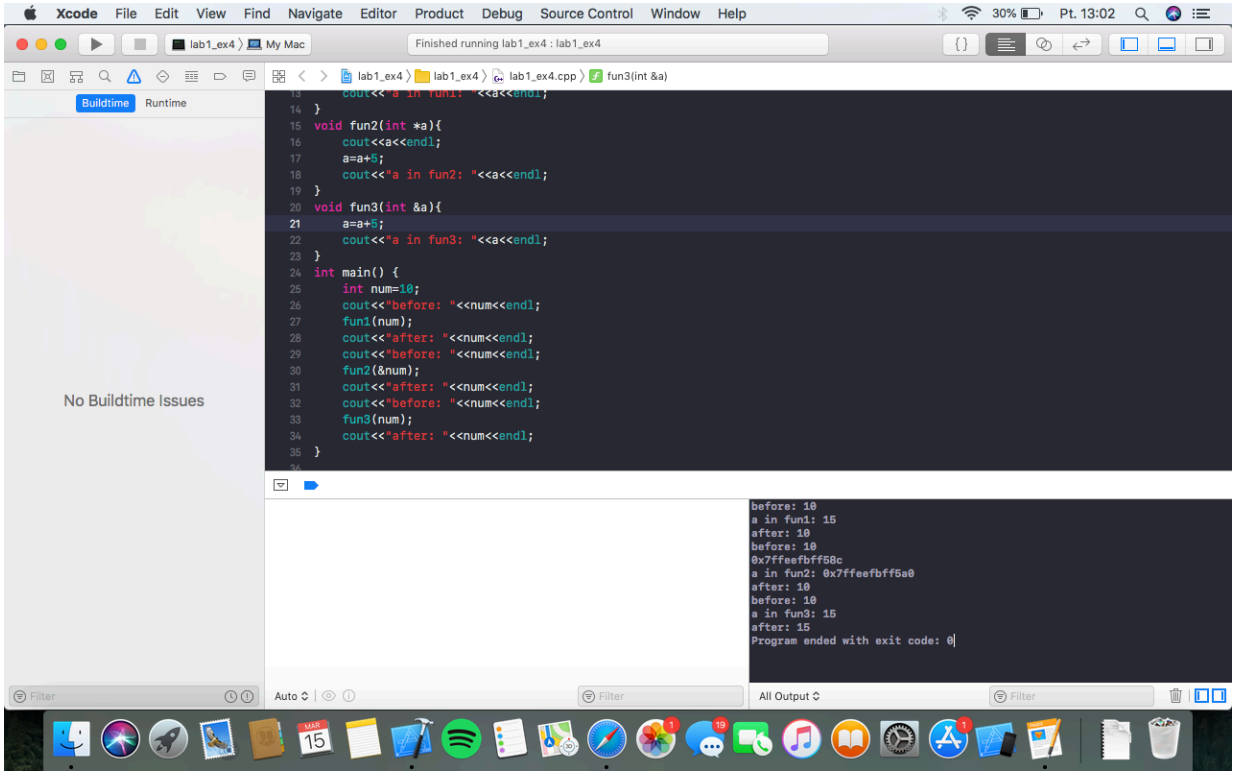


Task2.In c language to allocate dynamically memory, we use function malloc, or calloc(the difference is that calloc takes two parameters -the number of array elements and the size of each element, malloc needs only size of the requested memory in bytes. And to free the memory we use free function, which deallocates the memory.
In c++ language we use new operator to allocate space for single object, or array of objects. To deallocate memory we use delete commend which deletes either one object or array of objects (then we need to add [] operator after typing „delete").

Task3.

A pointer variable is a variable that copies the address of pointed variable (points to its address), the reference variable is a variable that has the same address like the referenced.(reference variable when printed will show the value of variable which it is referring to.If we change reference variable, the referred variable is changed too.)

Task4.



As can see
Function fun1 returns value 15, but does not change value of num, because fun1, operates on copy of num value,(that's why value of num is not changing at all)
Function fun2 operates on copy of address of num variable,(function copy address and moves this copy)
Function fun3 gets copy of address of num variable, and operates on its content.(function operates on variable placed at address of „a" parameter)

Task5.