REPORT : ASSIGNMENT 7

INPUT:
The input file taken is having instructions and labels in it. Then corresponding to that file we made an array of instructions and labels and corresponding to the labels yet another array of integers is made which is named labels which contains the index that the label denotes.

ALGO:
*register_address : This function gives the index of a register by its name in the register array which is an array of 32 integers , initially all are 0.

*Then program counter in initially made 0, as program counter increases then the code move forward in the instruction array.As the instruction is read from the instruction array then the instruction is parsed with the help of space and stored in an array corresponding to the instruction length.

- Then the first word of the instruction is read and programs corresponding to it are made.
- If its is add, then the index of the three registers if found out using theabove function and stored in the index corresponding to the first written register.
- Similarily all these instructions are executed.

*For the second part the array of strings containing the instruction name is mapped with the time taken by it using the map function and then at the end of each function the time taken by that instruction is added to the total time taken and even the program counter is also increased by 1 , after every instruction (except the jumping ones).