

- Computer Science:
what is Computer Science?
the subject of study is "problems"

• Fundamental Question:

¿ what problems can be solved in an automated way, and how?

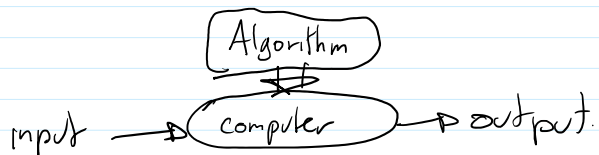
Dijkstra: "Computer Science is no more about computers, than Astronomy is about telescopes"

- "automated way": algorithm

... a sequence of unambiguous instructions for solving a problem.

algorithms produce a required output from a legitimate input

E.G. "Recipe":



E.G.

$$7 * 3 = 21$$

$$736 * 52 = \begin{array}{r} 736 \\ * 52 \\ \hline 1472 \end{array}$$

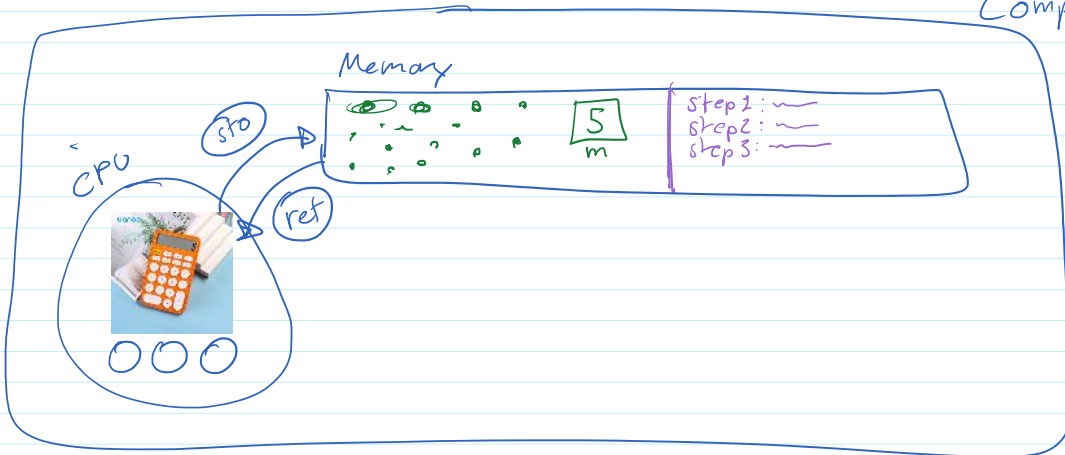


• Digital Computers.



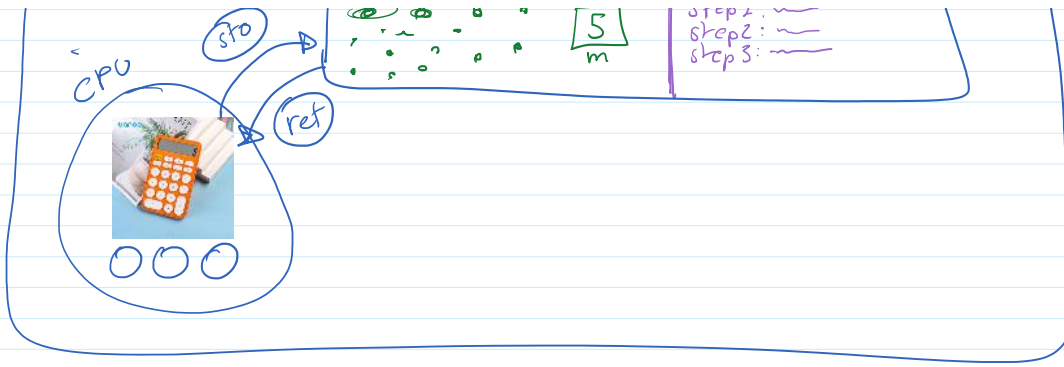
• Mental Model of Digital Computer:

digital.
Computer



```

01101110111
01010110111
01001100111
    
```



```

011011101111
010101101111
010011000111
:
:

```

- EOF -