

BASIC PROGRAMMING IN C

FREE ONLINE COURSE

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PROGRAMMING: A WAY OF THINKING

- Usually, people think that programming is spending all the day in front of a monitor typing strange words and doing things that only aliens can understand ;)

Programming is
10% writing code
and **90%**
understanding why
it's not working.

Yes, That is Programming

PROGRAMMING: BASIC DEFINITION

- Basically, programming means **solving problems**

A PARTICULAR WAY OF THINKING

- Today we are not going to write any code. We are just going to learn «how to think properly».
- When we have to solve a problem, we have to split it up into smaller problems, easier to solve.
- Let's understand better

HOW TO WALK

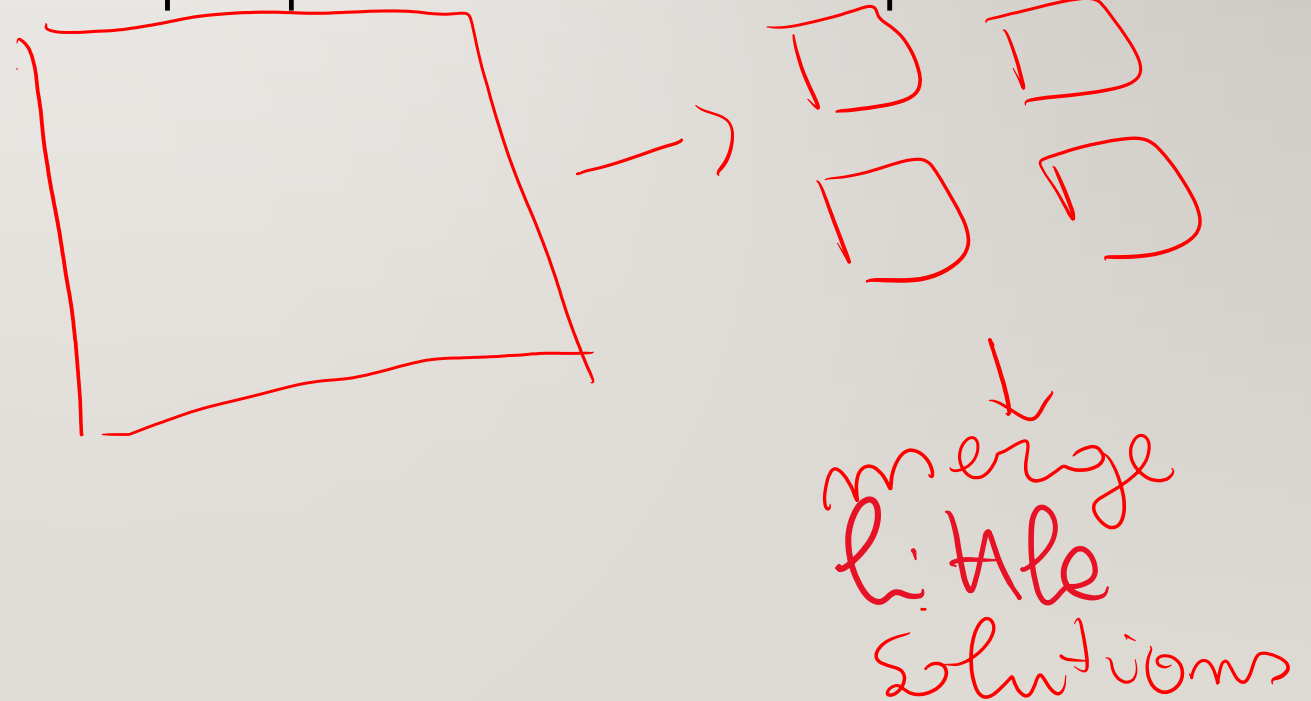
- Let's think that we have to explain to a little kid how to walk. We will not say just «walk». We would say something like:

1. Stand up;
2. Start moving forward your left foot;
3. Then move after your left foot your right foot *1 STEP*
4. Go on until you reach your destination

*REPEAT UNTIL
WHILE
DO WHILE*

SPLITTING PROBLEMS

- This is a rough description of how we walk. Generally, when we have to program, we should try to describe in the best way the steps required in order to solve the problem.
- Let's make some other examples



ALGORITHMS

- A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
- Basically, an algorithm is a “recipe” to solve a problem

Problem solving: FINDING SOLUTIONS TO PROBLEMS

MAKE A PHONE CALL

- Let's see how to solve the problem «make a phone call». Imagine that you have to explain how to make a phone call.
- What would you say?

NEXT LESSON

- Next lesson will be on 30-07-2020, after the database lesson of Mr. Hangalo.
- One of you will explain his solution to one exercise. If you can explain in English, it will be much better.

EXERCISE

- Describe the «recipe» to explain how to follow a lesson.

↓
ALGORITHM

FOLLOW A LESSON



EXERCISE

- Explain how to look for a word in a dictionary

LOOK FOR A WORD IN A DICTIONARY

