

CmpE 150 - Week 1

Section-04

CmpE 150 - Section 4

- **Lecture: Tuesday 78 (For all sections)**
- When?: FFF 345
- Where?: BM A4
- Assistant: Melisa İdil Şener
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- Resources:
 - <https://programming.cmpe.boun.edu.tr>
 - <https://github.com/melsener/cmpe150>

Important Reminder

- If your e-mail address that you use in registration.boun.edu.tr/ is one of
 - @hotmail
 - @outlook

Then please change it to one of the following:

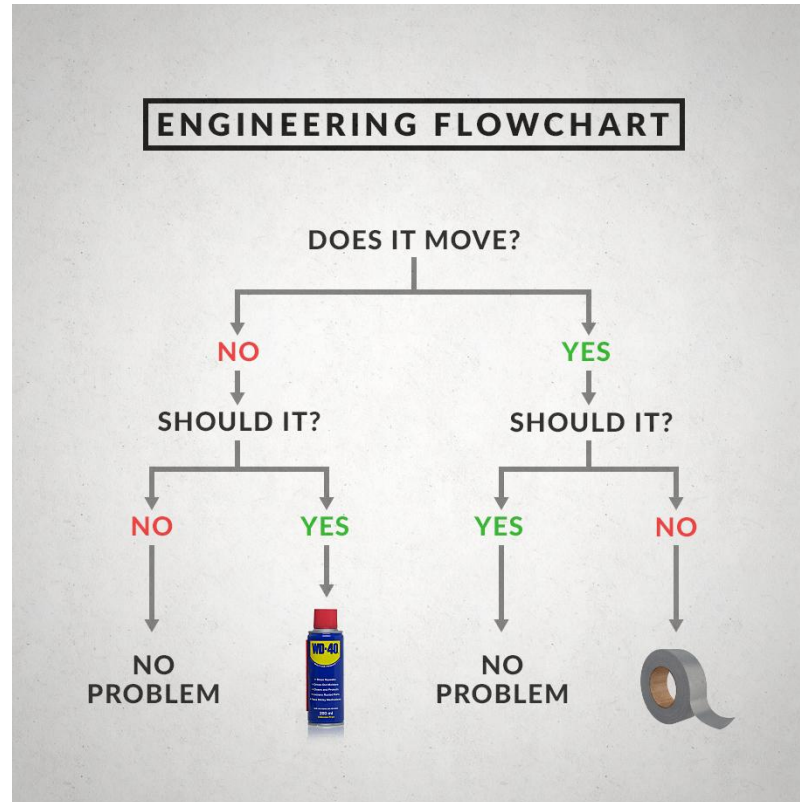
- @gmail
- @boun.edu.tr

Eclipse TeachingCodes Plugin

- It will be used for all labs, midterms, quizzes
- Summary of lecture slides
- Lab exercises
- PS Slides
- Your grades
- Projects

You'd better set it up to your computer.

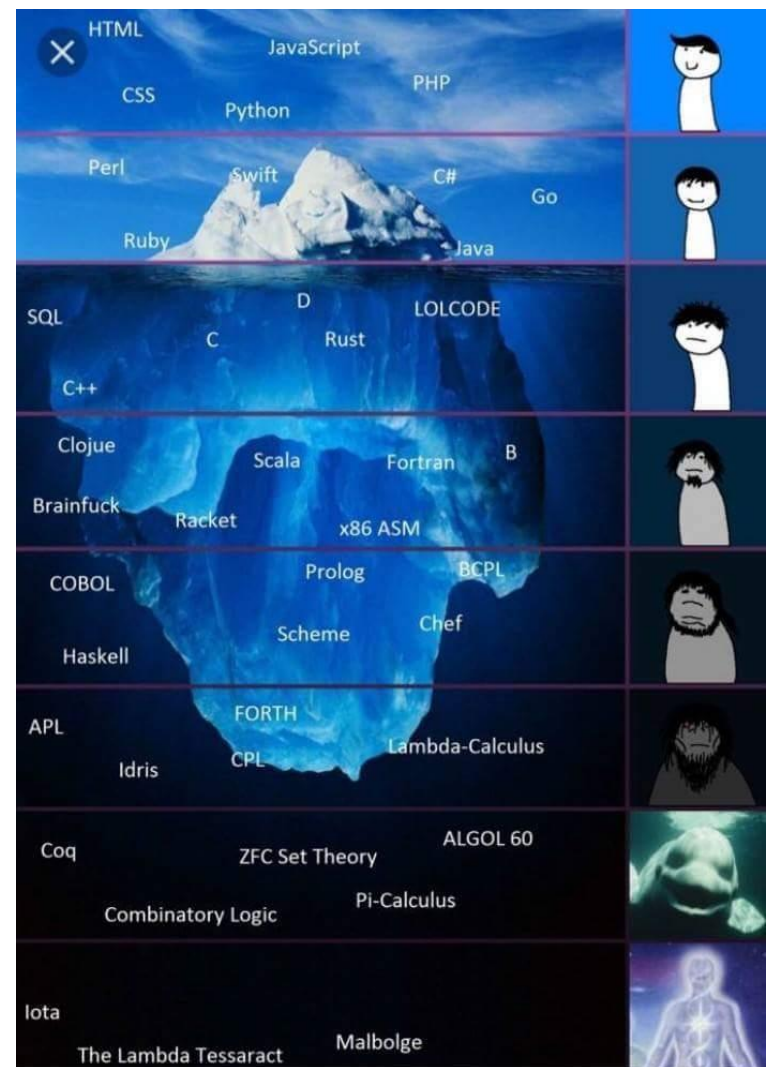
Problem Solving



Programming Languages

- Some of them are quite popular in some industries and specializations
- May propose different features
- For some specific applications, may be more flexible
- ...

Further Info: [computerscience.org](https://www.computerscience.org)



C Development Environment

1. Edit
2. Preprocess
3. Compile
4. Link
5. Load
6. Execute

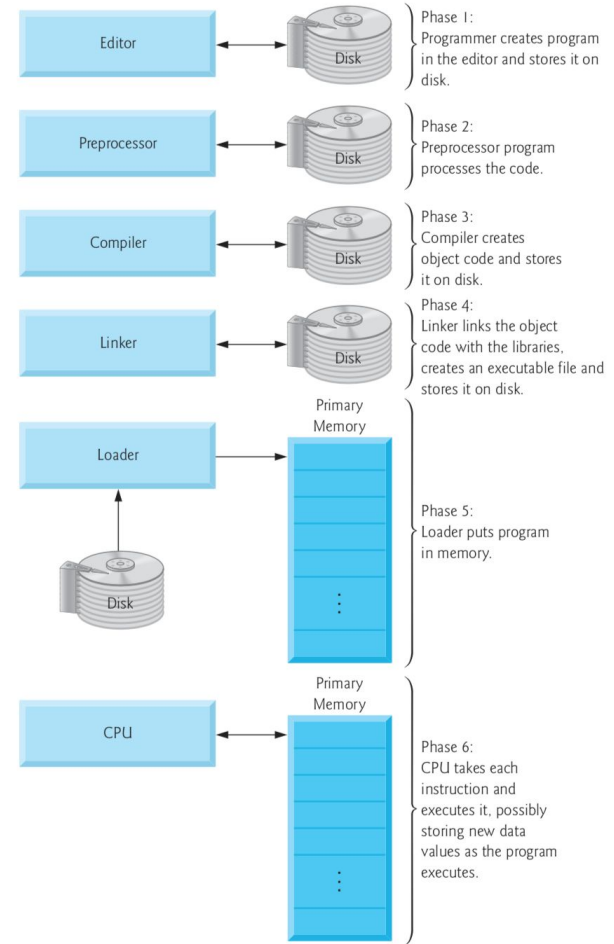


Fig. 1.7 | Typical C development environment.

Special Keywords

| Keywords | | | |
|--|--------|----------|----------|
| auto | double | int | struct |
| break | else | long | switch |
| case | enum | register | typedef |
| char | extern | return | union |
| const | float | short | unsigned |
| continue | for | signed | void |
| default | goto | sizeof | volatile |
| do | if | static | while |
| <i>Keywords added in C99 standard</i> | | | |
| <code>_Bool _Complex _Imaginary inline restrict</code> | | | |
| <i>Keywords added in C11 draft standard</i> | | | |
| <code>_Alignas _Alignof _Atomic _Generic _Noreturn _Static_assert _Thread_local</code> | | | |

Fig. 2.15 | C's keywords.

Where the magic happens -- main

- C programs contain one or more functions, one of which ***must*** be main.
- Every program in C begins executing at the function main.

Be Careful:

- Main \neq main
- mAin \neq main

Use it wisely.

Escape Sequences

| Escape sequence | Description |
|-----------------|--|
| <code>\n</code> | Newline. Position the cursor at the beginning of the next line. |
| <code>\t</code> | Horizontal tab. Move the cursor to the next tab stop. |
| <code>\a</code> | Alert. Produces a sound or visible alert without changing the current cursor position. |
| <code>\\</code> | Backslash. Insert a backslash character in a string. |
| <code>\"</code> | Double quote. Insert a double-quote character in a string. |

Fig. 2.2 | Some common escape sequences .

- Since the backslash (`\`) has special meaning in a string, (compiler recognizes it as an escape character) we use a double backslash (`\\`) to place a single backslash in a string.
- Printing a double quote also presents a problem because double quotes mark the boundaries of a string—such quotes are not printed.