# CmpE 150 - Week 1

Section - 02

# CmpE 150 - Section 2

- **Lecture: Tuesday 78 (For all sections)**
- When?: WWW 123
- Where?: BM A4
- Assistant: Melisa İdil Şener
  - E-mail: melisa.sener@boun.edu.tr
- 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/](registration.boun.edu.tr/) is one of
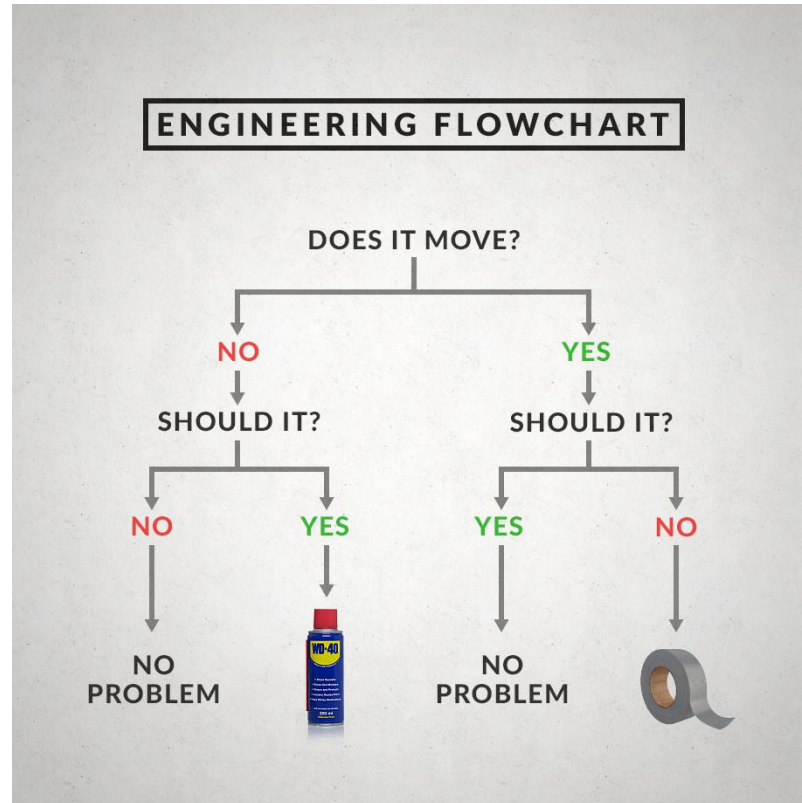  - @hotmail
  - @outlook

  Then please change it to one of the following:

  - @gmail
  - @boun.edu.tr

# Schedule

- Weekly quizzes will start after add-drop period
- MT1: 31 March
- MT2: 5 May
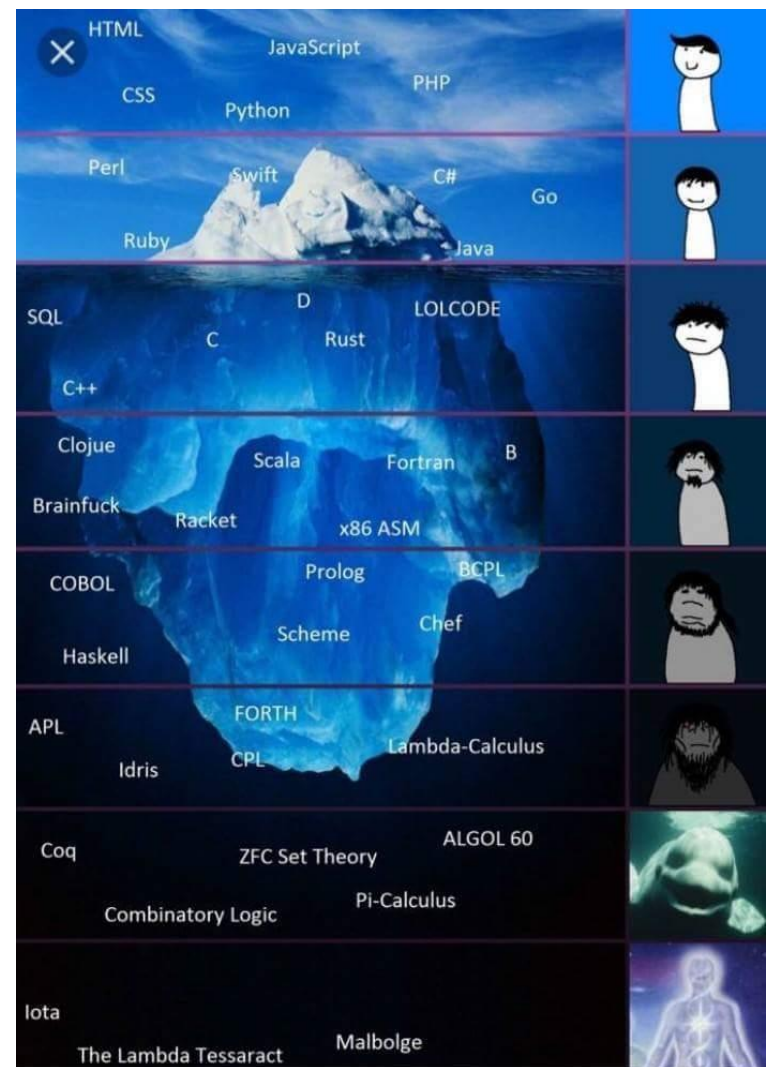- If you have conflict please change section in add-drop period

# 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

# Programming

- Allows us to give instructions to a computer in a language the computer understands
- Computer understands 0's and 1's
- Translating a programming language to 0's and 1's is called **compiling**

# C Development Environment

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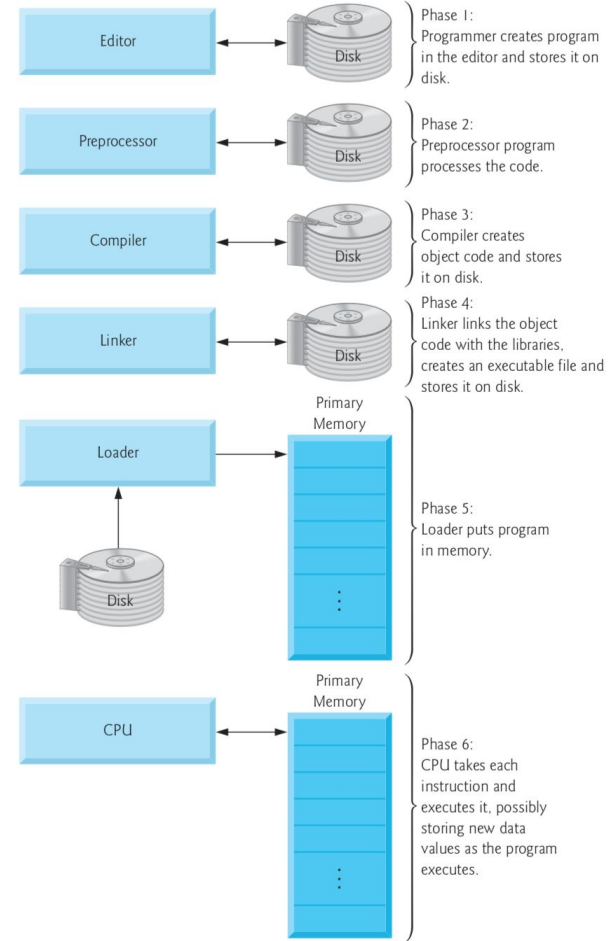3. Compile
4. Link
5. Load
6. Execute



**Fig. 1.7** | Typical C development environment.

Src: Deitel C How to Program

# Eclipse TeachingCodes Plugin

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

Set it up to your computer.

Your accounts will be created during add-drop period

# 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 ≠ main
- mAin ≠main

# 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 |

*Keywords added in C99 standard*

_Bool   _Complex   _Imaginary   inline   restrict

*Keywords added in C11 draft standard*

_Alignas   _Alignof   _Atomic   _Generic   _Noreturn   _Static_assert   _Thread_local

**Fig. 2.15**  |  C's keywords.

# Escape Sequences

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