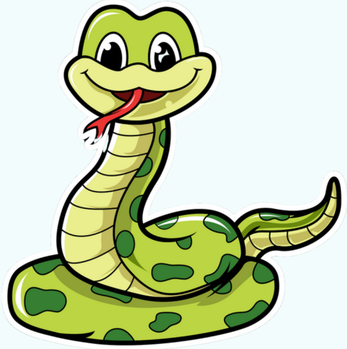
SNAKE GAME



START

3rd Year - CS dep. - Assembly course

Supervised by: Eng. Amany Sherif & Dr Sara Elmetwally

PROJECT IDEA

Our project is a classic snake game implemented using Assembly language on 8086 microprocessor.
The idea is to control the snake's movement using keyboard arrow keys while displaying the snake in real-time on the screen.

OUR TEAM

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SEC 4

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WHAT IS THE GOAL OF THE PROJECT?

The player controls a "snake" on the screen using arrow keys, trying to navigate the snake while avoiding collisions with itself or the screen boundaries.

The game includes basic mechanics for:

- Moving the snake in four directions (left, right, up, down).
- Drawing the snake and erasing its tail as it moves.
- Detecting and responding to user inputs via the keyboard.

How?

HOW THE CODE WORKS?

Main functionalities implemented:

- INT 10h: To move the cursor and display characters on the screen.
- INT 16h: To detect keyboard inputs.
- INT 1Ah: To handle timing and delay the snake's movement.


TECHNICAL DETAILS

- Data Section: Stores the snake's coordinates and updates them dynamically during gameplay.

- Game Loop
  - The snake's head is drawn at the new position, and the tail is erased.
  - The game checks for key presses to change the snake's direction.
  - The loop continues until the player presses ESC to quit.

- Movement Function
  - The snake's body moves by shifting each part to the position of the previous one, updating the head's position based on the direction.

THANK YOU

GAME OVER