Name: - Aarya Varat Joshi

Roll No:- 1801CS01 Subject:- Lab4 Report

#### Name of the GAME:

PING PONG

## Starting the game:

- open DOSBox 0.74.exe
- masm Lab4;
- link Lab4;
- Lab4

### Playing the Game:

- Controlling the left paddle: Press 'w' or 'W' to move UP and 's' or 'S' to move DOWN.
- Controlling the right paddle: Press 'o' or 'O' to move UP and 'l' or 'L' to move DOWN.
- The ball will bounce back after colliding with any paddle or the top and bottom walls
  of the screen.
- If the ball strikes the left or right wall of the screen it will start from the center of the screen.
- It can be played by two people or only one person.

## **Quitting the Game:**

Press 'Esc' key to exit the game and go back to DOS.

#### Important functions and Interrupts used in the game:

#### Clearing the screen:

- Interrupt used INT 10H
- INT 10h and AH = 00h Set Video Mode
- AL = 13h 320x200 256 color graphics (MCGA,VGA) THIS IS THE VIDEO MODE USED

#### **Drawing a Pixel:**

- Interrupt used INT 10H
- AH = 0Ch set the configuration to writing the pixel
- AL = 0Fh choose white as color of the pixel

#### **Checking Input from Keyboard:**

- Interrupt used INT 16H Keyboard BIOS Services
- AH = 01h check if any key is being pressed (if not check the other paddle)
- AH = 00h check which key is being pressed (AL = ASCII Character)

#### Moving the Paddles and Balls:

- The velocities are added to the current positions of the paddles and the balls
- the screen is cleared after the above operation for avoiding the formation of trails

# **Screenshots of the Game:**





