**Made by:**

* Abdul Rehman,

**Roll no:** 19L-1135

* Huma Karim,

**Roll no:** 19L-0927

**Report**

We have worked on the project **‘Super Mario’** and we used *graphic mode* to make this game. In the game ‘Super Mario’, we made

* A Mario Character
* A BackGround
* A Land
* 3 Hurdles
* 2 Enemies
* A Flying Monster
* Fireballs
* A Castle
* A Flag with Moon and Star

The working conditions of the games are given below:

**Movement of Mario Character:**

We made a Mario Character which has been assigned for a task to reach its kingdom without touching either the fireballs or the enemies that will be in its way.

So firstly, we used hardware interrupts to get input from the user. Users can move the character forward or backward by using keys **D** and **A** respectively. In order to make the character jump, **Space Bar** can be used.

**Enemies:**

First **Enemy** will be roaming in between hurdle 1 and hurdle 2, and the second one will be moving between hurdle 2 and hurdle 3. Any collision of these with the character results in losing the game. Also Mario is supposed to jump over these hurdles.

**Monster:**

To refrain Mario from reaching its kingdom, there’s a **Monster** flying in the sky throwing balls at regular intervals. Monster is continuously moving from right to left and vice versa. It's necessary for the players to avoid any kind of contact of Mario with these fireballs.

**Winning Conditions:**

Now if the player succeeds in making Mario character reach the **castle**, then a screen will be shown which displays **‘You won the game’**.

**Losing Conditions:**

If the Mario Character is in contact with any of the two enemies, the game will end. A screen will be shown which displays **‘You lost the game’.** Monster is responsible for throwing balls at the character.If the ball hits the character, the game is over. So to win the game, the player has to be careful from these **fireballs**.

**Quit:**

If we no longer want to play the game, we have added a function of quitting the game. This can be done by pressing the **‘Esc’** key. And in this way we can terminate the game.

Here’s a picture of what our game looks like:  
