- 1. Display Function: This function displays the main screen of the game. It will provide a user with two different gaming modes, first is *PLAYER VS*COMPUTER and the second is *PLAYER1 VS PLAYER2*. For displaying the text, an inbuilt function outtextxy() is used. Here, when the user press 1, player VS computer mode starts whereas, when the user press 2, player1 VS player2 mode turns on.
- 2. Ladder 1, Ladder 2: These functions create a graphical view of the ladder in the game. When the token reaches the bottom of a ladder, it climbs up the ladder and reaches its top. They are made by using multiple lines, which are drawn using the line() function. It requires the starting and end coordinates of the line. Here, setfillstyle() and Floodfill() function is used for styling and filling color into the ladder. For ladders, we have used the SOLID\_FILL style.
- **3.** Snake 1, Snake 2, Snake 3: These functions create a graphical view of the snake in the game. When a token reaches the head of the snake, the snake bites and, it slides down to the bottom of the snake. They are drawn using a combination of arc and lines. The arc() function draws an arc with center at (x, y) and given radius with starting and ending angle. For styling, we have set fill style as SLASH\_FILL.
- **4. Numbering:** This function displays the numbers on the board from 0-100, the name of the presenters, and the game name on the top-right corner.

- **5. Status:** This function displays the current status of the game i.e whose turn it is and the dice output.It is shown by the two rectangles one around the dice and other below the turn.Here rectangles are drawn using **rectangle()** function .
- **6. Welcome:** This function is used for creating a welcoming tune at the beginning of the game. It is done by using sound(), delay() and nosound() functions.
- **7. Dispdice:** This function is responsible for generating dots on the dice.
- **8. Getdice:** This function generates a random number for the dice. For the random number rand() function is used and for the dice output rand()%6+1 is done, which gives the dice output between [1,2,3,4,5,6].
- 9. Play: This function provides the playing environment in the Player VS Computer mode. Here user character is taken only for the player, and for the computer, the randomize() function is used, which generates random numbers. It allows the tokens to move forward, climb the ladder, and slide down when a snake bites. The movement of the token is given by using the getimage() and putimage() functions. Here getimage function copies the bit image of the token from the screen to memory. And putimage function puts the bit image previously saved with getimage back onto the screen. In this function, different tunes are also set when the token climbs up the ladder and slides down the snake.

- 10. **Play2:** This function is similar to the play function. The only difference is that the play2() function is responsible for the playing environment for the 2nd mode i.e, Player1 VS Player2. In this for both the player's characters are taken from the users.
- 11. Main: This function creates the graphic screen by using the initgrapgh() function. It also provides the game board which, is made by bars using the bar() function, and displays dice output. It calls all the rest of the functions to make the overall game. Here winning tune is also set, and whoever wins its name is also displayed.