TASK-12 SIMULATE GAMING CONCEPTS USING PYGAME

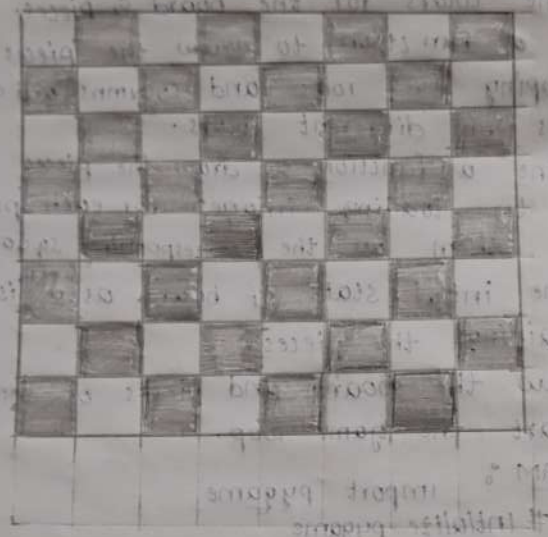
Aim: Write a Python program to develop a chess board using pygame.

ALGORITHM:

1. Import pygame & intialize it.
2. Set screen size & title.
3. Define colors for the board & pieces. Define a function to draw the pieces board by looping over rows and columns and drawing squares of different colors.
4. Define a function to draw the pieces on the board by loading images for each piece & placing them on the corresponding square.
5. Define intial state of board as a list of lists containing the pieces.
6. Draw the board and pieces on the screen
7. Start the game loop.

PROGRAM:

```
import pygame
# Intialize pygame
pygame.init()
# set screen size & title
screen_size = (640, 640)
screen = pygame.display.set_mode(screen_size)
pygame.display.set_caption('Chess Board')
# Define function to draw pieces
def draw_pieces(board):
    piece_images = {
    'r': pygame.image.load
    'q': pygame.image.load
    'p': pygame.image.load
}
for row in range(8):
for cool in range(8):
```



```
piece = board[row][col]
    if piece != ' ':
# Define initial state of board
    board = [
    ['r', 'n', 'b', 'q', 'k', 'b']
    ['p', 'p', 'p', 'p', 'p', 'p']
    [' ', ' ', ' ', ' ', ' ', ' ']
    [' ', ' ', ' ', ' ', ' ', ' ']
    [' ', ' ', ' ', ' ', ' ', ' ']
    [' ', ' ', ' ', ' ', ' ', ' ']
    ['P', 'P', 'P', 'P', 'P', 'P', 'P', 'P']
    ['R', 'N', 'B', 'Q', 'K', 'B', 'N', 'R']
    ]
        # Draw board & pieces
            draw_board()
            draw_pieces(board)
    # start game loop
            while True:
        for event in pygame.event.get():
        if event.type == pygame.QUIT:
                pygame.quit()
                quit()
        pygame.display.update()
```

RESULT: Thus the Simulating gaming concepts using pygame was verified & executed successfully.

VELTECH	
EX No.	
PERFORMANCE (5)	
RESULT AND ANALYSIS (5)	
VIVA VOCE (5)	
RECORD (5)	
TOTAL (20)	
SIGN WITH DATE	