Task - 12

Aim: Simulate gaming concepts using pygame

Algorithm: 1. Import pygame package and initialize it
• Define the window size and title

3. create a snake class which initialize the snake position and movement

4. create a fruit class

5. create a function to check if the snake collides

6. create a function to check if snake collides window.

Program:

```
# importing libraries
import pygame
import time
import random
Snake_speed = 15
  # window size
     window_x = 720
    window_y = 480
# defining colors
    black = pygame.color(0,0,0)
    white = pygame.color (255,255,255).
    red = py game.colour (255,0,0)
    green = py game.colour (0,255,0).
```

output

Score = 0

blue = pygame . colour (0, 0, 255)

initializing pygame

pygame .init ()

initialize game window

pygame .display .set - caption ("greeks of geeks snakes")

FPS (frame persecond)

FPS = pygame .. time clock ()

defining snake default position

snake _ position = [100, 50]

defining first

[90, 50].

/ [80, 50],

[70, 50],

fruit position.

fruit _position = [random .randrange (1, * 10)

Task 12 :

Aim : write a Python program to design of a chess board using Pygame

Algorithm :

1. Import pygame and initialize it
2. Set screen size and title
3. Define colors for the board the pieces
4. Define a function to draw the piece on board by loading images
5. Draw the board and piece on the screen

Program :

```
import pygame
# initialize pygame
    pygame.init()
# set screen size and title
    screen_size = (640, 640)
    screen = pygame.display.set
    pygame.display.set_caption ('chess board')

# Define colors
    black = (0,0,0)
    white = (255, 255, 255)
    brown = (153, 76, 0)
# Define function
    for row in range (8):
        square = colour =
        square_rect =
```

output:

	X		X		X	
X		X		X		X
	X		X		X	
X		X		X		X
	X		X		X	
X		X		X		X
	X		X		X	

completed

```
# function to draw the pieces
def draw_pieces(board):
    pieces_images = {}
    for row in range(8):
        for col in range(8):
            piece = board[row][col]
            if piece != ".":
                piece_image = piece_images[piece]
                piece_rect = pygame.Rect(
                    screen.blit(
```

Define initial state of board.

```
board = ['r', 'n', 'b', 'q', 'k', 'b', 'n', 'r']
```

Draw board and pieces.

```
draw_pieces(board)
    # Start game loop
        while true:
            pygame.type.quit()
            pygame.quit()
            quit()
pygame.display.update()
```

VELTECH	
EX NO.	12
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	
RECORD (4)	
TOTAL (15)	
SIGN WITH DATE	

Result : Thus the program for the pygame is executed and verified successfully.