6/10/25 Task-12: Simple game simulation using pygame.

Aim:- To develop a simple using the pygame module that demonstrates basic gaming concepts such as movement collision detection, event handling and screen updates.

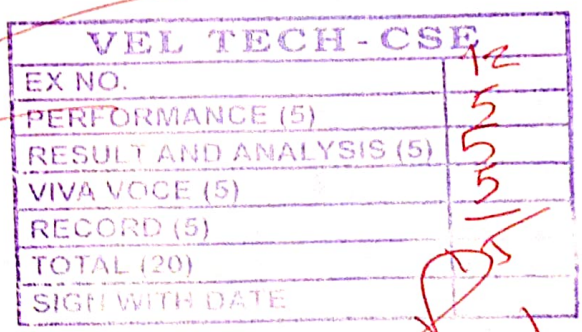
Algorithm:-

1. import the pygame module and initialize it using pygame.init()
2. create a game window with a title, set dimensions, and background color
3. Define game objects
   - player
   - Enemy
4. Handle user input for player movement using keyboard events (KEYDOWN, KEYUP)
5. update enemy movement by changing its position automatically.

Program:

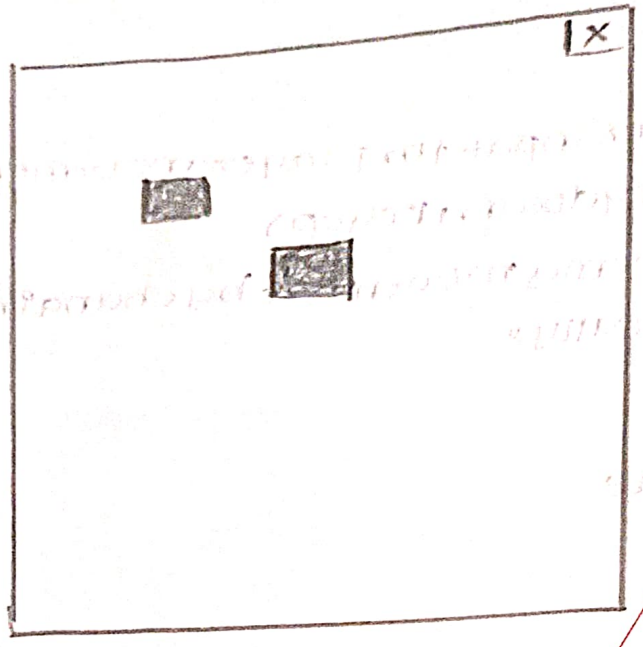
```
import pygame
import sys
pygame.init()
Screen_width = 600
SCreen_height = 400
Screen = pygame.display.set_mode((Screen_width,
Screen_height))
pygame.display.set_caption("simple pygame simulation")
background_colour = (173, 216, 230)
player_colour = (0, 128, 0)
enemy_color = (255, 0, 0)
text_color = (0, 0, 0)
Player = pygame.Rect(280, 340, 40, 40)
enemy = pygame.Rect(0, 50, 40, 40)
player_speed = 5
enemy_speed = 4
```

```
clock = pygame.time.clock()
running = true
while running:
screen.fill (background_color)
for event in pygame.event.get():
    if event.type == pygame.QUIT:
        pygame.quit()
        sys.exit()
pygame.draw.rect (screen, player_color, player)
pygame.draw.rect (screen, enemy_color, Enemy)
pygame.display.update()
clock.tick (30)
pygame.quit()
```



Result:

Thus a simple pygame-based game simulation was successfully.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