Task 12:- Simulate Gaming concepts using pygame.

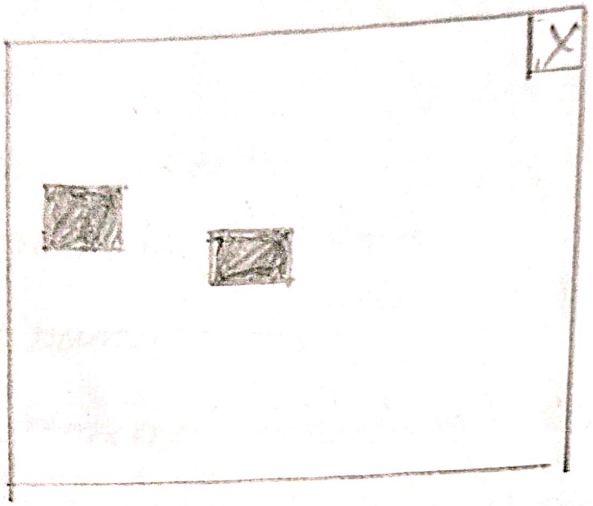
Aim:- To simulate basic concepts using Pygame module By creating a simple interactive game where a player object can move with arrow keys, an enemy move automatically, and collision detection. ends the game.

Algorithm:-

1. Import and Initialize Pygame.
   Import the pygame module and initialize it using Pygame.init().
2. Create a Player and enemy object using rectangles.
3. Move Player using arrow keys.
4. Move enemy automatically.
5. If player collides with energy show "Game over" And stop the game.

Program:-

```
keys = pygame.key.get_pressed()
If not game_over:
    if keys[pygame.K_LEFT] and player.x>0:
        player.x += -5
    if keys[pygame.K_RIGHT] and player.x<370:
        player.x += 5
enemy.x += -4
if enemy.x<-30:
    enemy.x = 400
if player.colliderect(energy):
    game_over = True
```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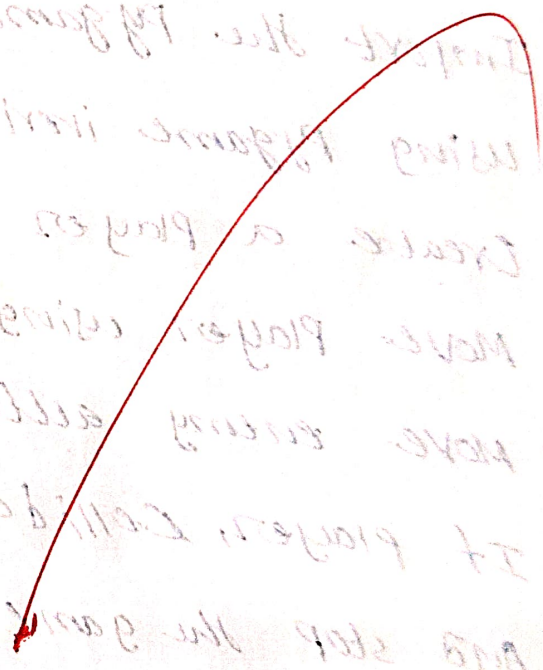
Input:-

Use ← and → arrow keys to move.

Output:-

- A window with a moving blue player square.
- A red enemy square moves towards the player.
- On collision: "Game over" is shown.



```
win.fill((255, 255, 255)).
pygame.draw.rect(win, (0,0,255), player)
pygame.draw.rect(win, (255,0,0), enemy).
if game_over:
    text = font.render("Game over", True, (0,0,0)).
    win.blit(text, (130,130)).
pygame.display.update().
clock.tick(30)
```

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RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGNATURE	

Result:- Thus, the simulate gaming concepts using pygame is executed successfully.

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