```
import pygame
import random
pygame.init()

#Screen
screen_width=800
screen_height=600
screen=pygame.display.set_mode((screen_width, screen_height))

#Title
pygame.display.set_caption("VMC Pygame - Homework 1 (Snake Game)")

#Variable to check if the game is running or stopped
running=True

#Snake Body
snake_pos=[[300, 300], [330, 300], [360, 300], [390, 300]]

#Directions
step=20
down=(0, step)
up=(0, -step)
right=(step, 0)
left=(-step, 0)
direction=left

#Apple
apple_pos=[260, 300]

#Score
score=0

#Timer
timer=0

#Font
font=pygame.font.SysFont("Inter", 25)

#Game Over
game_over=0

#Main Game Loop
while running:
    pygame.time.Clock().tick(30)
    #RGB values = (Red, Blue, Green)
    screen.fill((0, 100, 0))
    #Quit
```

```
for event in pygame.event.get():
    #Quit
    if event.type==pygame.QUIT:
        print("Quit")
        running=False
    #Key press
    if event.type==pygame.KEYDOWN:
        if event.key==pygame.K_DOWN:
            direction=down
            print("DOWN")
        elif event.key==pygame.K_UP:
            direction=up
            print("UP")
        elif event.key==pygame.K_RIGHT:
            direction=right
            print("RIGHT")
        elif event.key==pygame.K_LEFT:
            direction=left
            print("LEFT")

#Border collision
if snake_pos[0][0]>=800 or snake_pos[0][0]<=0 or snake_pos[0][1]>=600 or snake_pos[0][1]<=0:
    game_over=1
    running=False
    print("Collision!")

#Timer
timer+=1
if timer==5:
    snake_pos=[[snake_pos[0][0]+direction[0], snake_pos[0][1]+direction[1]]]+snake_pos[:-1]
    timer=0

#Snake
for x, y in snake_pos:
    pygame.draw.circle(screen, (255, 0, 0), (x, y), 10)

#Apple
pygame.draw.circle(screen, (0, 0, 255), apple_pos, 10)

    #If snake eats apple
if snake_pos[0]==apple_pos:
    x=((random.randint(20, 780))//20)*20
    y=((random.randint(20, 580))//20)*20
    apple_pos=[x, y]
    snake_pos.append(snake_pos[-1])
    score+=1
```

```
#Score
text=font.render("Score: "+str(score), True, (255, 255, 255))
screen.blit(text, (0, 0))

#Death
for i in range(1, len(snake_pos)):
    if snake_pos[0]==snake_pos[i]:
        game_over=1
        running=False

#Death Board
if game_over==1:
    print("Game Over!!!")
    print("Your final score:", score)

#Screen Update
pygame.display.update()
```