

# Report

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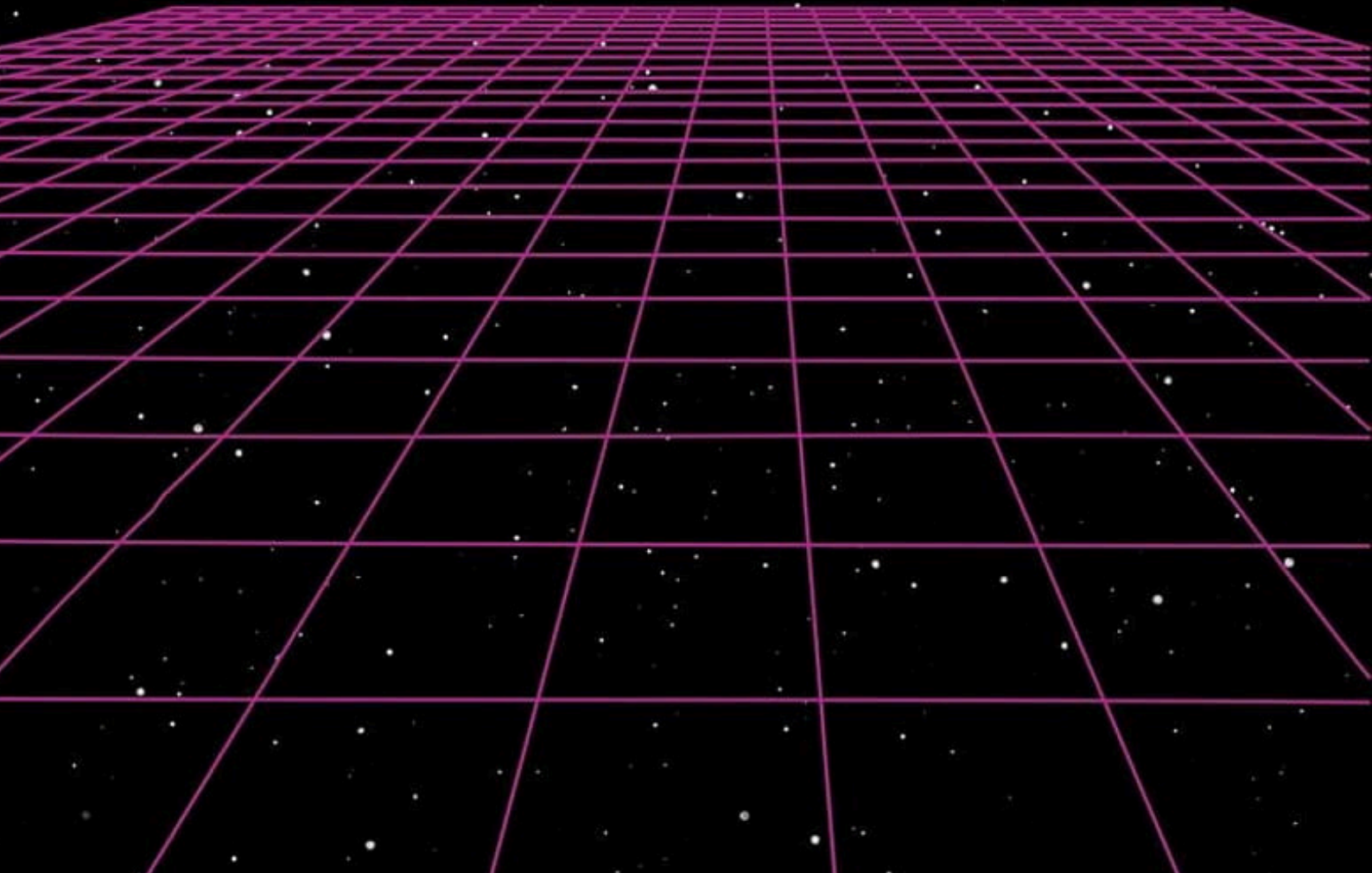
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COMPUTER PROJECT

# RETRO ARCADE



# Introduction

We all have played arcade games like space invaders, snake and the food, rock paper scissors. If you loved playing those games, then I guarantee you that you will love our project.

In this Software you'll be able to:

- Play four different types of game
  - Snake Game
  - Tic Tac toe
  - Rock Paper Scissors
  - Space invaders
- Add your Name to the database
- To store your game score individually
- Edit your player details in the database

# Project Overview

Our project is an all-in-one arcade gaming platform that revives the excitement of classic games while integrating modern features for player management and score tracking. The software includes four popular games—Snake Game, Tic Tac Toe, Rock Paper Scissors, and Space Invaders—creating a versatile and entertaining experience for users. Players can register their names, play games, store their scores, and edit their profiles within the software, enhancing personalization and fostering friendly competition. This project bridges nostalgia and technology, offering a fun and engaging environment for users of all ages.

# Abstract

This project is on recreating old arcade games. You can store your name and score in the game database.

There are four different games,

1. Snake Game
2. Tic Tac Toe
3. Rock Paper Scissors
4. Space Invaders

We are using Python with SQL connectivity to store all the cores and player names so it can be viewed by the players whenever they play.

# Potential Use Cases

- Entertainment and Stress Relief: This platform provides a way for users to relax and have fun during breaks or leisure time.
- Skill Building and Cognitive Training:
- Tic Tac Toe encourages strategic thinking and planning.
- Snake Game and Space Invaders promote hand-eye coordination and quick reflexes.
- Score Competition: Players can challenge friends, compete for high scores, and strive to outperform their personal bests, adding a competitive element to the gameplay.
- Learning Database Management: For developers and learners, this project offers an opportunity to understand database interaction through player registration, score storage, and data retrieval.
- Game Programming Practice: Coders can explore game development techniques and the integration of gaming libraries like pygame in Python.

# Features

## **Four Classic Games:**

- Snake Game: Guide a snake to eat food and grow longer, avoiding self-collision and the game boundary.
- Tic Tac Toe: A simple yet challenging two-player game where the goal is to align three Xs or Os in a row.
- Rock Paper Scissors: A game of chance where players choose between rock, paper, or scissors to compete against the computer.
- Space Invaders: An arcade shooter game where players must protect their base by shooting down advancing alien enemies.

## **Player Registration and Profile Creation:**

- Players can add their names to the database, creating personalized profiles for better engagement and score tracking.
- Score Tracking and Database Integration:
- Each player's scores are individually stored in an SQLite database, allowing them to track performance over time.

## **Profile Editing and Management:**

- Users can edit player details, ensuring the database reflects current and accurate player information.
- User-Friendly Interface:
- The software is designed with an easy-to-navigate interface, enabling users to switch between games, view scores, and manage profiles effortlessly.

# Technologies Used

- **Programming Language:** Python for overall code structure and game logic.
- **Game Development Library:** pygame for creating and handling game mechanics, animations, and user interactions.
- **Graphical User Interface (GUI):** tkinter for designing a visually appealing and user-friendly interface.
- **Database Management:** SQLite for handling player data and score records in a lightweight, accessible format.
- **Data Handling Tools:** Python's built-in sqlite3 module for database operations such as adding, updating, and retrieving data.
- **Version Control:** Git for code versioning and collaboration.
- **Additional Libraries:** Various Python libraries for handling input/output, timers, and data manipulation.



# How It Works

## **User Registration:**

- Users register their names via the application's interface, creating a personalized profile that is saved in the SQLite database.

## **Game Selection Menu:**

- A main menu allows users to choose from the available games: Snake Game, Tic Tac Toe, Rock Paper Scissors, or Space Invaders.

## **Gameplay:**

- Each game launches in its dedicated window or section, using pygame for smooth and interactive gameplay. Players can interact using the keyboard or mouse, depending on the game.

## **Score Recording:**

- After completing a game session, scores are automatically recorded in the SQLite database. Each entry is linked to the player's name, providing a comprehensive record of gameplay history.

## **Profile Management:**

- Players can update their profile information directly from the interface, allowing for quick edits to names or game data as needed.

## **Data Retrieval:**

- The software retrieves and displays player scores upon request, allowing users to view their achievements and progress over time.

# Future Enhancements

- **Online Multiplayer Capabilities:** Expand the platform to support online play, allowing users to compete against friends or other players remotely.
- **Leaderboards:** Introduce a global or local leaderboard feature that displays the highest scores, motivating players to improve and compete.
- **Additional Game Titles:** Add more games, including both classic and new original games, to increase the software's variety and appeal.
- **Improved Graphics and Sound Effects:** Upgrade game visuals and sound effects for a more immersive experience using advanced libraries.
- **User Authentication System:** Implement a secure login and user authentication system to protect data and ensure privacy.
- **Cross-Platform Support:** Develop a mobile-friendly version of the software to expand usability and access.
- **Achievements and Rewards:** Include an achievement system that unlocks rewards or badges for players when they reach certain milestones.

# Main Project

## • SOURCE CODE

```
1 import mysql.connector as sqltor
2 mycon=sqltor.connect(host='localhost',user='root',password='Pass@25het',database='project_game')
3 cursor=mycon.cursor()
4
5
6
7 #-----
8 #functions
9
10 def create():
11     #To create databases
12     cursor.execute('create table Game_score(Sno int primary key,Name char(40),Game1 int,Game2 int,Game3 int,Game4 int)')
13     #mycon.close()
14 #create()
15
16 def show():
17     #To show the database
18     cursor.execute('select * from Game_score')
19     data=cursor.fetchall()
20     for row in data:
21         for col in row:
22             print(col,end='|')
23         print()
24
25 def delete():
26     # to delete a data
27     show()
28     pd=int(input('Enter id to be deleted:'))
29     inp=(pd,)
30     cursor.execute("delete from Game_score where Sno='%s'",inp)
31     mycon.commit()
32
33 def insert():
34     #To check if new player
35     global p
36     print()
37     name=input('Enter name:')
38     i=input('Are you new player(y/n):')
39     if i=='y':
40         p=int(input('Enter your id:'))
41         cursor.execute('insert into Game_score(Sno,Name,Game1,Game2,Game3,Game4) values({}, "{}", {}, {}, {}, {})'.format(p,name,0,0,0,0))
42         mycon.commit()
43     else:
44         p=int(input('Enter your id:'))
45
46 #-----
47
```

```

49
50 # 1 in 5 game
51 print("_____Retro Arcade_____")
52 show()
53 insert()
54 #-----
55
56 # main database menu
57
58 def main_database():
59     while True:
60         print('-----')
61         print('1.To show the database')
62         print('2.To insert new data')
63         print('3.To delete a data')
64         print('0.To go back to main menu')
65         mr=int(input('Enter your choice: '))
66         if mr==1:
67             print()
68             show()
69         elif mr==2:
70             print()
71             insert()
72         elif mr==3:
73             print()
74             delete()
75         elif mr==0:
76             print()
77             break
78
79
80
81 #-----
82
83 #main game menu
84 def main_game():
85     maingameLoop=True
86     while maingameLoop:
87         #menu
88         print('-----')
89         print("_____Retro Arcade_____")
90         print("1. Snake Game")
91         print("2. Rock Paper Scissor")
92         print("3. Tik tac toe")
93         print("4. Space Invaders")
94         print('0.To go to main menu')

```

```

96     uc = int(input("Insert the game choice you want to play: "))
97
98     #to end program
99     if uc ==0:
100         maingameLoop=False
101
102
103     #Game 1 code
104     if uc == 1:
105         snake()
106     elif uc == 2:
107         ropasc()
108     elif uc ==3:
109         tictactoe()
110     elif uc==4:
111         spacein()
112
113 def snake():
114     print()
115     # importing libraries
116     import pygame
117     import time
118     import random
119
120     snake_speed = 15
121
122     # Window size
123     window_x = 720
124     window_y = 480
125
126     # defining colors
127     black = pygame.Color(0, 0, 0)
128     white = pygame.Color(255, 255, 255)
129     red = pygame.Color(255, 0, 0)
130     green = pygame.Color(0, 255, 0)
131     blue = pygame.Color(0, 0, 255)
132
133     # Initialising pygame
134     pygame.init()

```

```

136 # Initialise game window
137 pygame.display.set_caption('Snake game')
138 game_window = pygame.display.set_mode((window_x, window_y))
139
140 # FPS (frames per second) controller
141 fps = pygame.time.Clock()
142
143 # defining snake default position
144 snake_position = [100, 50]
145
146 # defining first 4 blocks of snake body
147 snake_body = [[100, 50],
148               [90, 50],
149               [80, 50],
150               [70, 50]
151               ]
152
153 # fruit position
154 fruit_position = [random.randrange(1, (window_x//10)) * 10,
155                  random.randrange(1, (window_y//10)) * 10]
156
157 fruit_spawn = True
158
159 # setting default snake direction towards
160 # right
161 direction = 'RIGHT'
162 change_to = direction
163
164 # initial score
165 score_1 = 0
166
167 # displaying Score function
168 def show_score(choice, color, font, size):
169     # creating font object score_font
170     score_font = pygame.font.SysFont(font, size)
171
172     # create the display surface object
173     # score_surface
174     score_surface = score_font.render('Score : ' + str(score_1), True, color)
175
176     # create a rectangular object for the text
177     # surface object
178     score_rect = score_surface.get_rect()
179
180     # displaying text
181     game_window.blit(score_surface, score_rect)
182
183 # game over function
184 def game_over():
185     # creating font object my_font
186     my_font = pygame.font.SysFont('times new roman', 50)
187     my_font_2=pygame.font.SysFont('times new roman', 20)
188     my_font_3=pygame.font.SysFont('times new roman', 20)
189
190     # creating a text surface on which text
191     # will be drawn
192     game_over_surface = my_font.render('Your Score is : ' + str(score_1), True, red )
193     game_over_surface_2 = my_font_2.render('Created by Het patel ', True, red )
194     game_over_surface_3 = my_font_3.render('Retro games created by Utkarshsinh Jadeja, Meet Patel, Het Patel', True, red )
195     print(score_1)
196     inp=(score_1,p)
197     cursor.execute('update Game_score set Game1=Game1+%s where Sno=%s',inp)
198     mycon.commit()
199
200     # create a rectangular object for the text
201
202     # surface object
203     game_over_rect = game_over_surface.get_rect()
204     game_over_rect_2 = game_over_surface_2.get_rect()
205     game_over_rect_3 = game_over_surface_3.get_rect()
206
207     # setting position of the text
208     game_over_rect.midtop = (window_x/2, window_y/4)
209     game_over_rect_2.midtop = (window_x/2, window_y/2.5)
210     game_over_rect_3.midtop = (window_x/2, window_y/2)
211
212     # blit will draw the text on screen
213     game_window.blit(game_over_surface, game_over_rect)
214     game_window.blit(game_over_surface_2, game_over_rect_2)
215     game_window.blit(game_over_surface_3, game_over_rect_3)
216
217     pygame.display.flip()
218
219     # after 2 seconds we will quit the program
220     time.sleep(2)
221
222     # deactivating pygame library
223     pygame.quit()
224
225     # quit the program
226

```

```

232 while True:
233
234     # handling key events
235     for event in pygame.event.get():
236         if event.type == pygame.KEYDOWN:
237             if event.key == pygame.K_UP:
238                 change_to = 'UP'
239             if event.key == pygame.K_DOWN:
240                 change_to = 'DOWN'
241             if event.key == pygame.K_LEFT:
242                 change_to = 'LEFT'
243             if event.key == pygame.K_RIGHT:
244                 change_to = 'RIGHT'
245
246     # If two keys pressed simultaneously
247     # we don't want snake to move into two
248     # directions simultaneously
249     if change_to == 'UP' and direction != 'DOWN':
250         direction = 'UP'
251     if change_to == 'DOWN' and direction != 'UP':
252         direction = 'DOWN'
253     if change_to == 'LEFT' and direction != 'RIGHT':
254         direction = 'LEFT'
255     if change_to == 'RIGHT' and direction != 'LEFT':
256         direction = 'RIGHT'
257
258     # Moving the snake
259     if direction == 'UP':
260         snake_position[1] -= 10
261     if direction == 'DOWN':
262         snake_position[1] += 10
263     if direction == 'LEFT':
264         snake_position[0] -= 10
265     if direction == 'RIGHT':
266         snake_position[0] += 10
267
268     # Snake body growing mechanism
269     # if fruits and snakes collide then scores
270     # will be incremented by 10
271     snake_body.insert(0, list(snake_position))
272     if snake_position[0] == fruit_position[0] and snake_position[1] == fruit_position[1]:
273         score_1 += 10
274         fruit_spawn = False
275     else:
276         snake_body.pop()

```

```

278
279     if not fruit_spawn:
280         fruit_position = [random.randrange(1, (window_x//10)) * 10,
281                             random.randrange(1, (window_y//10)) * 10]
282
283     fruit_spawn = True
284     game_window.fill(black)
285
286     for pos in snake_body:
287         pygame.draw.rect(game_window, green,
288                             pygame.Rect(pos[0], pos[1], 10, 10))
289     pygame.draw.rect(game_window, white, pygame.Rect(
290         fruit_position[0], fruit_position[1], 10, 10))
291
292     # Game Over conditions
293     if snake_position[0] < 0 or snake_position[0] > window_x-10:
294         game_over()
295         break
296     if snake_position[1] < 0 or snake_position[1] > window_y-10:
297         game_over()
298         break
299
300     # Touching the snake body
301     for block in snake_body[1:]:
302         if snake_position[0] == block[0] and snake_position[1] == block[1]:
303             game_over()
304             break
305
306     # displaying score countinuously
307     show_score(1, white, 'times new roman', 20)
308
309     # Refresh game screen
310     pygame.display.update()
311
312     # Frame Per Second /Refresh Rate
313     fps.tick(snake_speed)

```

```

319 def ropasc():
320     print()
321     #This is a rock paper scissors game
322     import random
323     cm=["Rock","Paper","Scissors"]
324     os=0
325     score_2=0
326     n=int(input("How many rounds do you want to play ?"))
327     for x in range(n):
328         print("Press 'r' for choosing Rock !")
329         print("Press 'p' for choosing Paper !")
330         print("Press 's' for choosing Scissors !")
331         m=input("What is your move ?")
332         c=random.choice(cm)
333         print("Opponenet's move:",c)
334         if m=="r" and c=="Paper" :
335             print("Opponent wins !")
336             os=os+1
337         elif m=="r" and c=="Rock":
338             print("It's a Draw !")
339         elif m=="r" and c=="Scissors":
340             print("You win !")
341             score_2=score_2+1
342
343         elif m=="p" and c=="Scissors" :
344             print("Opponent wins !")
345             os=os+1
346         elif m=="p" and c=="Paper":
347             print("It's a Draw !")
348         elif m=="p" and c=="Rock":
349             print("You win !")
350             score_2=score_2+1
351
352         elif m=="s" and c=="Rock" :
353             print("Opponent wins !")
354             os=os+1
355         elif m=="s" and c=="Scissors":
356             print("It's a Draw !")
357         elif m=="s" and c=="Paper":
358             print("You win !")
359             score_2=score_2+1

```

```

360
361     elif m!="s" and m!="p" and m!="r" :
362         print("Press 'y' for Yes")
363         print("Press 'n' for No")
364         o=input("Invalid move ! Are you SURE you want to play a game ?")
365
366         if o=='y':
367             print("Then play properly!")
368             n=n+1
369         else :
370             print("OK ! Goodbye ! ")
371             break
372     print("Opponenet's Score : ",os)
373     print("Your Score : ",score_2)
374     if os>score_2:
375         print("The Opponent has won!")
376     elif os==score_2:
377         print("The game was a Draw!")
378     else:
379         print("You won the game!")
380     inp=(score_2,p)
381     cursor.execute('update Game_score set Game2=Game2+%%s where Sno=%%s',inp)
382     mycon.commit()
383     print('Created by Utkarshsinh Jadeja')
384
385     #-----

```

```

388 def tictactoe():
389     print()
390     board=['-','-','-','-','-','-','-','-','-']
391     n1 = input("Insert name for player 1: ")
392     n2 = 'ai'
393     score_3=0
394     import random
395     cm=[0,1,2,3,4,5,6,7,8]
396
397
398     def dis():
399         print('|'+board[0]+'|'+board[1]+'|'+board[2]+'|')
400         print('|'+board[3]+'|'+board[4]+'|'+board[5]+'|')
401         print('|'+board[6]+'|'+board[7]+'|'+board[8]+'|')
402
403     def check(board):
404         p1='x'
405         p2='o'
406         if board[0] == board[1] == board[2]==p1 or board[0] == board[1] == board[2] == p2:
407             return True
408         elif board[3] == board[4] == board[5]==p1 or board[3] == board[4] == board[5]==p2:
409             return True
410         elif board[6] == board[7] == board[8]==p1 or board[6] == board[7] == board[8]==p2:
411             return True
412         elif board[0] == board[3] == board[6]==p1 or board[0] == board[3] == board[6]==p2:
413             return True
414         elif board[1] == board[4] == board[7]==p1 or board[1] == board[4] == board[7]==p2:
415             return True
416         elif board[2] == board[5] == board[8]==p1 or board[2] == board[5] == board[8]==p2:
417             return True
418         elif board[0] == board[4] == board[8]==p1 or board[0] == board[4] == board[8]==p2:
419             return True
420         elif board[2] == board[4] == board[6]==p1 or board[2] == board[4] == board[6]==p2:
421             return True
422         else:
423             return False
424
425     def inp1(board):
426         print('now its your turn',n1)
427         x=int(input("Enter the position:"))
428         if board[x-1]!='-':
429             print('value already exist')
430             return inp1(board)
431         else:

```

```

432             return x
433
434     def inp2(board):
435         print('now its your turn',n2)
436         c=random.choice(cm)
437         if board[c-1]!='-':
438             print('value already exist')
439             return inp2(board)
440         else:
441             return c
442
443
444     for m in range(9):
445         if m%2==0:
446             x=inp2(board)
447             board[x-1]='o'
448             dis()
449             cm.remove(x)
450             if check(board):
451                 print(n2, 'win')
452                 break
453
454         else:
455
456             x=inp1(board)
457             board[x-1]='x'
458             dis()
459             cm.remove(x)
460             if check(board):
461                 print(n1, 'win')
462                 score_3= score_3 + 1
463                 break
464
465     inp=(score_3,p)
466     cursor.execute('update Game_score set Game4=Game4+{%s} where Sno=%s',inp)
467     mycon.commit()
468     print('Created by Utkarshsinh Jadeja')
469     print('game over')
470
471 #-----

```



```

412 #Game 4
413 #Space shooter
414 elif uc==4:
415
416     import os
417     import turtle
418     import math
419     import random
420     import platform
421     #if on windows you import win sound or yet,just use linux
422     if platform.system()=='Windows':
423         try:
424             import winsound
425         except:
426             print('winsound module not available')
427
428
429     wn= turtle.Screen()
430     wn.title("shooter space")
431     wn.bgcolor('black')
432     wn.setup(width=800, height=600)
433     try:
434         wn.bgpic('K:\\CLASS 12A\\SPACE SHOOTER\\space_background.gif')
435     except:
436         print()
437     wn.tracer(0)
438
439     #register the shape
440     try:
441         turtle.register_shape('K:\\CLASS 12A\\SPACE SHOOTER\\spaceinvader3.gif')
442     except:
443         print()
444     try:
445         turtle.register_shape('K:\\CLASS 12A\\SPACE SHOOTER\\spaceship2.gif')
446     except:
447         print()
448
449     #Draw border
450     border_pen=turtle.Turtle()
451     border_pen.speed(0)
452     border_pen.color('white')
453     border_pen.penup()
454     border_pen.setposition(-300,-300)
455     border_pen.pendown()
456     border_pen.pensize(3)
457

```

```

458     for side in range(4):
459         border_pen.fd(600)
460         border_pen.lt(90)
461         border_pen.hideturtle()
462
463     # Score
464     score_4 = 0
465
466     # Paddle A
467     player = turtle.Turtle()
468     player.speed(0)
469     try:
470         player.shape('K:\\CLASS 12A\\SPACE SHOOTER\\spaceship2.gif')
471     except:
472         player.shape('triangle')
473     player.color('white')
474     player.setheading(90)
475     player.penup()
476     player.goto(0,-250)
477
478
479
480
481     #no of enemies
482     number_of_enemies=20
483     enemies=[]
484
485     enemy_start_x=-200
486     enemy_start_y=250
487     enemy_number=0
488

```

```

490 #add enemies in list
491
492 for i in range(number_of_enemies):
493     enemies.append(turtle.Turtle())
494
495
496 for enemy in enemies:
497     enemy.color('blue')
498     try:
499         enemy.shape('K:\\CLASS 12A\\SPACE SHOOTER\\spaceinvader3.gif')
500     except:
501         enemy.shape('square')
502     enemy.penup()
503     enemy.speed(0)
504     x= enemy_start_x + (50*enemy_number)
505     y= enemy_start_y
506     enemy.setposition(x,y)
507     #update enemy number
508     enemy_number+=1
509     if enemy_number==10:
510         enemy_start_y-=50
511         enemy_number=0
512
513 enemyspeed=0.1
514
515 # Pen
516 pen = turtle.Turtle()
517 pen.speed(0)
518 pen.color('white')
519 pen.penup()
520 pen.hideturtle()
521 pen.goto(0,260)
522 pen.write('Score: 0', align = 'center' , font=('Courier', 20 , 'normal'))
523
524 # Pen2
525 pen2=turtle.Turtle()
526 pen2.speed(0)
527 pen2.penup()
528 pen2.color('white')
529 pen2.hideturtle()
530 pen2.goto(0,240)
531 pen2.write('Created by Meet patel', align = 'center' , font=('Courier', 10 , 'normal'))
532

```

```

533 # Pen3
534 pen3=turtle.Turtle()
535 pen3.speed(0)
536 pen3.penup()
537 pen3.color('white')
538 pen3.hideturtle()
539 pen3.goto(10,-290)
540 pen3.write('Retro games created by Utkarshsinh Jadeja, Meet Patel, Het Patel', align = 'center' , font=('Courier', 10 , 'normal'))
541
542 #create the player's bullet
543 bullet= turtle.Turtle()
544 bullet.color('yellow')
545 bullet.shape('triangle')
546 bullet.penup()
547 bullet.speed(0)
548 bullet.setheading(90)
549 bullet.shapesize(0.5,0.5)
550 bullet.hideturtle()
551
552 bulletspeed=1
553
554 #define bullet state
555 #ready -ready to fire
556 #fire - bullet is firing
557 bulletstate = 'ready'
558
559
560 #Function
561 def play_sound(sound_file,time=0):
562     #windows
563     if platform.system()=='Windows':
564         winsound.PlaySound(sound_file,winsound.SND_ASYNC)
565     #linux
566     elif platform.system()=='Linux':
567         os.system('aplay -q{}&'.format(sound_file))
568

```

```

569 def player_left():
570     x=player.xcor()
571     x -=25
572     if x<-280:
573         x=-280
574     player.setx(x)
575
576 def player_right():
577     x=player.xcor()
578     x +=25
579     if x>280:
580         x=280
581     player.setx(x)
582
583 def fire_bullet():
584     #declare bullet state as a global if it needs changed
585     global bulletstate
586     if bulletstate == 'ready':
587         bulletstate= 'fire'
588         #move the bullet to above
589         play_sound('K:\CLASS 12A\SPACE SHOOTER\shoot.wav')
590         x= player.xcor()
591         y= player.ycor() +10
592         bullet.setposition(x,y)
593         bullet.showturtle()
594
595 def isCollision(t1,t2):
596     distance=math.sqrt(math.pow(t1.xcor()-t2.xcor(),2)+math.pow(t1.ycor()-t2.ycor(),2))
597     if distance >15:
598         return False
599     else:
600         return True
601
602
603 def quit():
604     global running
605     running=False
606
607 #Keyboard binding
608 wn.listen()
609 wn.onkeypress( player_left, 'Left')
610 wn.onkeypress( player_right, 'Right')
611 wn.onkeypress(fire_bullet, 'space')
612 wn.onkeypress(quit,'q')
613
614 running=True
615 #Main game loop
616 while running:
617     wn.update()
618
619     for enemy in enemies:
620         #move the enemy
621         x=enemy.xcor()
622         x+=enemyspeed
623         enemy.setx(x)
624
625
626         #move enemy back and forth
627         if enemy.xcor()>280:
628             for e in enemies:
629
630                 y=e.ycor()
631                 y-=40
632                 e.sety(y)
633                 #change enemy direction
634                 enemyspeed*=-1
635
636         if enemy.xcor()<-280:
637             for e in enemies:
638                 y=e.ycor()
639                 y-=40
640                 e.sety(y)
641                 #change enemy direction
642                 enemyspeed*=-1
643
644
645         #check for a collision between the bullet and the enemy
646         if isCollision(bullet,enemy):
647             play_sound('K:\CLASS 12A\SPACE SHOOTER\invaderkilled.wav')
648             #reset the bullet
649             bullet.hideturtle()
650             bulletstate = 'ready'
651             bullet.setposition(0,-400)
652             score_4 += +5
653             pen.clear()
654             pen.write('Score: {}'.format(score_4), align = 'center' , font=('Courier', 20 , 'normal'))
655
656             #reset the enemy
657
658             enemy.setposition(0,50000)

```

```

662         if isCollision(player,enemy):
663             play_sound('k:\CLASS 12A\SPACE SHOOTER\explosion.wav')
664             player.hideturtle()
665             enemy.hideturtle()
666             print('Game over, Thank you for playing')
667             break
668
669     #move the bullet
670     if bulletstate=='fire':
671         y= bullet.ycor()
672         y +=bulletspeed
673         bullet.sety(y)
674
675     #check to see if the bullet has gone to the top
676     if bullet.ycor()> 275:
677         bullet.hideturtle()
678         bulletstate= 'ready'
679
680     #Border checking
681
682     if bullet.ycor() > 275:
683         bullet.hideturtle()
684         bulletstate='ready'
685         score_4 += -1
686         pen.clear()
687         pen.write('Score: {}'.format(score_4), align ='center' , font=('Courier', 20 , 'normal'))
688         x= player.xcor()
689         y= player.ycor() +10
690         bullet.setposition(x,y)
691
692     wn.bye()
693     inp=(score_4,p)
694     cursor.execute('update Game_score set Game4=Game4+{%s} where Sno=%s',inp)
695     mycon.commit()
696
697     cursor.execute('select * from Game_score')
698     data=cursor.fetchall()
699     for row in data:
700         for col in row:
701             print(col,end='|')
702         print()
703
704     print('-----')
705     print('Game over!!,Thanks for playing')
706     print('Created by Utkarshsinh Jadeja, Meet Patel, Het Patel, Student of Class 12A(Batch 2022-2023)')
707

```

# • OUTPUT

```
C:\WINDOWS\system32\cmd  X  +  v

-----Retro Arcade-----

['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 340, 1, 0, 86]
[2, 'Utkarsh', 170, 0, 0, 0]

Enter name:Meet
Are you new player(y/n):n
Enter your id:1

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice:
```

```
C:\WINDOWS\system32\cmd  X  +  v

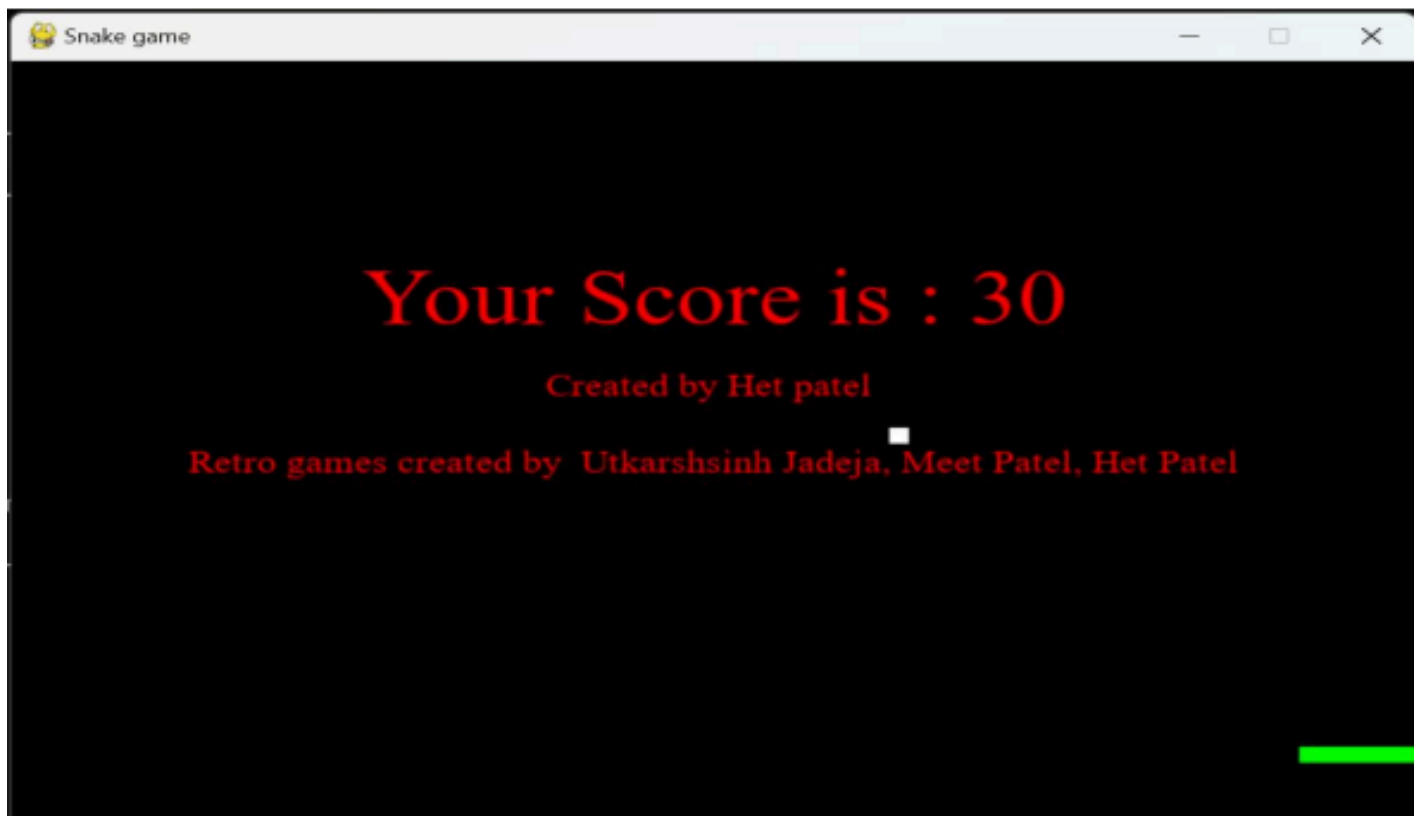
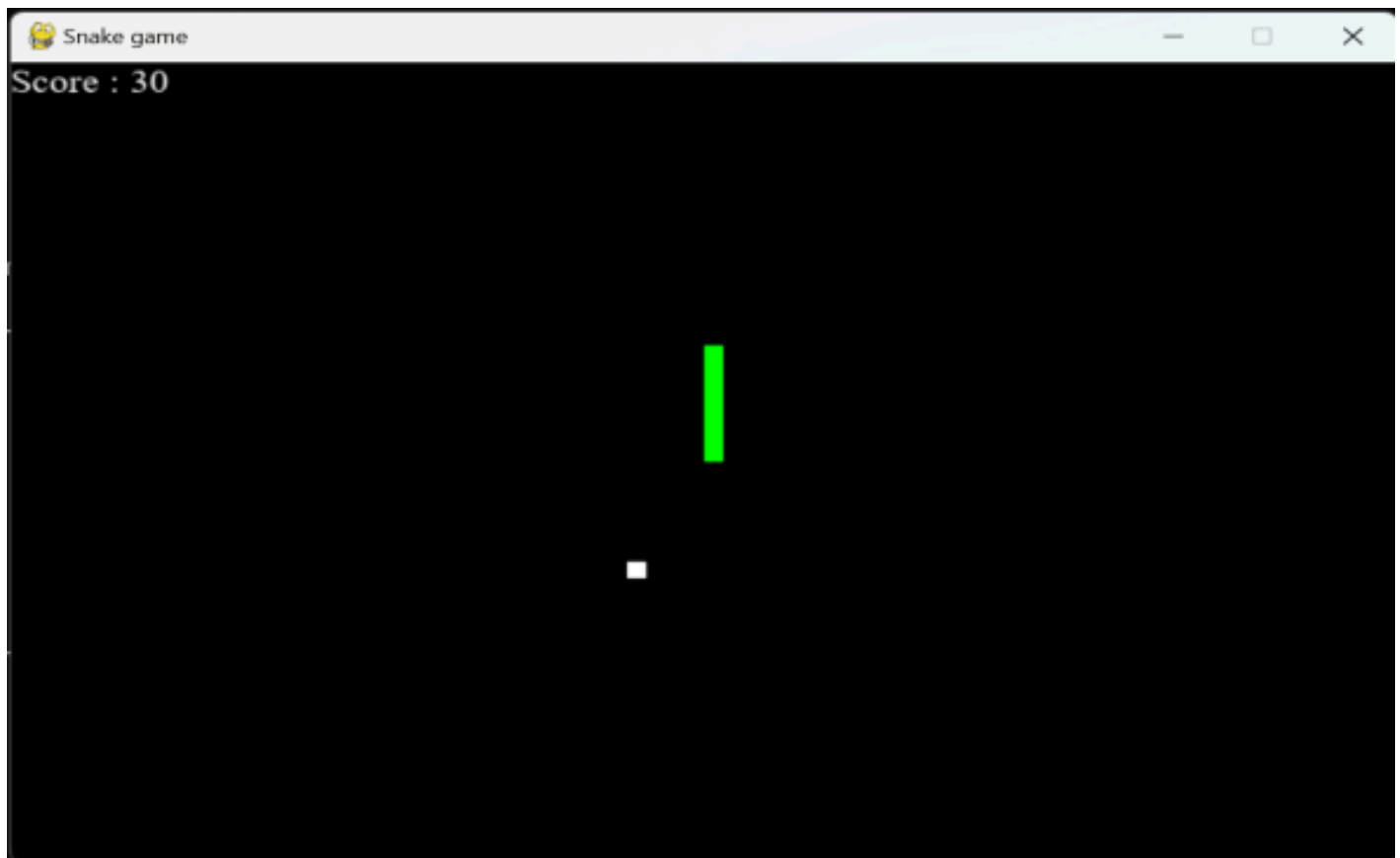
-----Retro Arcade-----

['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 340, 1, 0, 86]
[2, 'Utkarsh', 170, 0, 0, 0]

Enter name:Meet
Are you new player(y/n):n
Enter your id:1

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 1
-----

-----Retro Arcade-----
1. Snake Game
2. Rock Paper Scissor
3. Tisk tac toe
4. Space Invaders
0.To go to main menu
Insert the game choice you want to play: 1
```



```
C:\WINDOWS\system32\cmd.exe
-----Retro Arcade-----

['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 498, 1, 0, 86]
[2, 'Utkarsh', 179, 0, 0, 0]

Enter name:meet
Are you new player(y/n):n
Enter your id:1

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 1

-----Retro Arcade-----
1. Snake Game
2. Rock Paper Scissor
3. Tik tac toe
4. Space Invaders
0.To go to main menu
Insert the game choice you want to play: 2

How many rounds do you want to play ?2
Press 'r' for choosing Rock !
Press 'p' for choosing Paper !
Press 's' for choosing Scissors !
What is your move ?r
Opponent's move: Rock
It's a Draw !
Press 'r' for choosing Rock !
Press 'p' for choosing Paper !
Press 's' for choosing Scissors !
What is your move ?p
Opponent's move: Paper
It's a Draw !
Opponent's Score : 0
Your Score : 0
The game was a Draw!
Created by Utkarshsinh Jadeja

-----Retro Arcade-----
1. Snake Game
2. Rock Paper Scissor
3. Tik tac toe
4. Space Invaders
0.To go to main menu
Insert the game choice you want to play: |
```

```
C:\WINDOWS\system32\cmd.exe

What is your move ?p
Opponent's move: Paper
It's a Draw !
Opponent's Score : 0
Your Score : 0
The game was a Draw!
Created by Utkarshsinh Jadeja

-----Retro Arcade-----
1. Snake Game
2. Rock Paper Scissor
3. Tik tac toe
4. Space Invaders
0.To go to main menu
Insert the game choice you want to play: 3

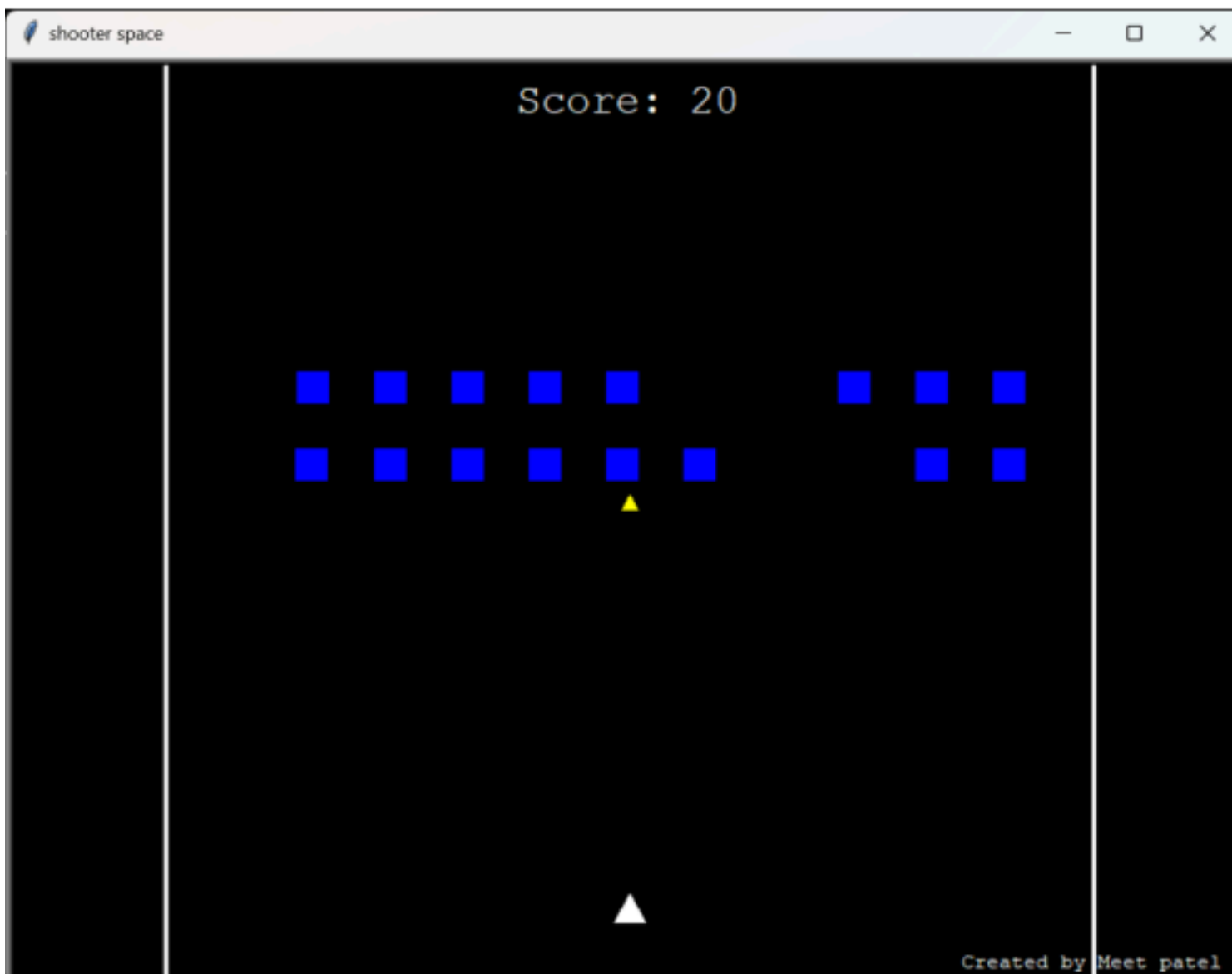
Insert name for player 1: meet
now its your turn ai
|_|_|
|_|_|
|_|o|
now its your turn meet
Enter the position:3
|_|_|x|
|_|_|
|_|o|
now its your turn ai
|_|_|x|
|_|_|
|_|o|
now its your turn meet
Enter the position:8
|_|_|x|
|_|_|
|_|x|o|
now its your turn ai
|_|_|x|
|_|_|
|_|x|o|
now its your turn meet
Enter the position:4
|_|_|x|
|x|_|
|_|x|o|
now its your turn ai
|_|_|x|
|x|_|
|_|x|o|
ai win
Created by Utkarshsinh Jadeja
game over
```

```
-----Retro Arcade-----
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 86]
[2, 'Utkarsh', 170, 0, 0, 0]

Enter name:meet
Are you new player(y/n):n
Enter your id:1

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 1

-----
-----Retro Arcade-----
1. Snake Game
2. Rock Paper Scissor
3. Tik tac toe
4. Space Invaders
0.To go to main menu
Insert the game choice you want to play: 4
```





```
C:\WINDOWS\system32\cmd  X  +  v

-----Retro Arcade-----

['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]

Enter name:Het
Are you new player(y/n):y
Enter your id:3
```

```
C:\WINDOWS\system32\cmd  X  +  v

-----Retro Arcade-----

['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]

Enter name:Het
Are you new player(y/n):y
Enter your id:3

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 2
=====
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice:
```

```
C:\WINDOWS\system32\cmd.exe
-----Retro Arcade-----
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 178, 0, 0, 0]

Enter name:Het
Are you new player(y/n):y
Enter your id:3

-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 2

-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1

-----
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 178, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]

-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: |
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1

-----
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 178, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]

-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 2

Enter name:Saumya
Are you new player(y/n):y
Enter your id:4

-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1

-----
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 178, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 2
```

```
Enter name:Saumya
Are you new player(y/n):y
Enter your id:4
-----
```

```
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 3
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
Enter id to be deleted:3
-----
```

```
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: |
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 3
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[3, 'Het', 0, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
Enter id to be deleted:3
-----
```

```
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: |
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 1
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
-----
1.To show the database
2.To insert new data
3.To delete a data
0.To go back to main menu
Enter your choice: 0
```

```
['ID', 'Name', 'Game 1', 'Game 2', 'Game 3', 'Game 4']
[1, 'Meet', 490, 1, 0, 115]
[2, 'Utkarsh', 170, 0, 0, 0]
[4, 'Saumya', 0, 0, 0, 0]
```

```
-----Retro Arcade-----
1.To Play Game
2.To Manage game databases
0.To End program
Enter your choice: 0
-----
```

```
-----
Game over!!Thanks for playing
Created by Utkarshsinh Jadeja, Meet Patel, Het Patel, Student of Class 12A(Batch 2022-2023)
```

```
D:\CLASS 12A\retro game>
```

THANK

YOU