Tack in simulate Gaming ancests using sygume ATM: To simulate Garning concepts using pygurne chake game. Address 1. come a latter program to create a snake Game csing Myame Ackase. conditions . 1. set the window size 3. create a snake 3 mare the snakes to move in the directions when refliright dow and ul key is Pressed. 4. when the snake hit the fruit, increase the score by 10. 5. If the snoke. hits the window. Game over. Algorithm: 1. Imbre Pygame Package and interire it 2. Define the compose size and title 31 create a shake class which intializes the shake fosition and color. he create a fluit class which inhalizes the fluit Position and exter. 5. voole a function to theck if the snake addides with the flux and increase the store 6 vecte a function to chear if the the snake childes with window and end the end the source. 7. Create a function to ultide the snake Position based on the user input.

8. Create a function to uldate the state dishary and draw the snake and fruit.

9. Create a game woll to continuously ultate the game display, snake Position, and Check for collisions.

to the game if the user quits or the smalle collides with

LOWER MANN AND HARDE OF Sample outful: Store to my of the house and and again and the (1-1)19 4 () - (Sept.) outlet. (110019 - 0) 0: 5102 17 2009 1 N sets . exceety (1 spoil . 8 Ki () SUCY · Moleton _ Him The preside them set min it U foot alon , had

come the subject exempt entire money se-

verded same saling.

1/2x

baker i

```
Pregram:
  at imbre libraries
    import to gome
    import the
    Imfort birdorn
      make - seed = 15
    # coindoco size
    window- X = 270
     windo w-y = uso
ot define colors
   back = Aygame . Color (0,0,0)
    black
  white = Py same. (olor (255, 255, 255)
   hed = Py same. color (225,010)
  green = Pygame. color (0,255,0)
   Here = lygame. color (0,0,225).
 # in Itialize game window
 Pysame distay. Sol-aption (lacks for been snakes)
   Some-windows by game. display, set-mode ((window-x, window-)
  # FPS (-Frame) Per SECOND) Controller
   As = 18 same . time . clock ()
                             POSITION
 # define snake default
  Shake - Position = (100150)
#defining first holder of grake body
    sharce-body = [ (100,56]
                    [9050]
                     [80,50],
# fruit Position
full_lostion = [raintom, randrange (1, (window-x1110))* 10
            kantom. randrathe (1, windo to - 41/10)) + 10)
```

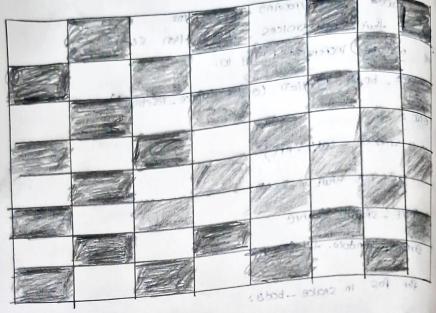
```
must - spoon = True
  through defend snowe direction towards
 # Heht
  direction = ' RIGHT!
 Using e_ to = direction
 # intial score
 Score = 0
  the displaying scare function the
 def stoco-score (Doice, color, fort, size):
  the creating force object scare force
 Score-ford = Py some. fort. sys fort (fort, size)
 # create the display surface object
 # Score _ surface
 Store _surface = score -fort . render ('score ; ' +str (score) Fittle, color)
 # create a rectationar object for the best
 # surface object
 Store_rect = score _surface . set _rect()
# disfloging text
 game - window, blit (swe _surface, source_red)
# game over function
 def game -over ():
# creating font object my_font
 my -font = Pygame, font, sys font (" times new roman!, so)
# creating a text surface on which text
 # will be drawn
   game - over + surface = my-font . render (
         Your store is: 14 str (some), The med)
# preste a redanguar object for the text
# surface object-
```

```
game - over rea = game over surface . get rea U
  It seems Ashion of the lext
  some_over -red many = (window_x 12, condow_x/4)
A BIH com drow the text on screen
 game_andow. Hit (same _over_ surface, same _over_rett)
 Py game. display. flip()
A after a seconds we will quit the program
  time. Sleep (2)
# deactivating Pygarre library
 Py game. quit ()
# quit the Program
 quit ()
# main function
  while thee
  # handling key events
  for even in Assure . even . sell)
   if event. Type == 14 some. KEY DOWN!
   If event, key = = pygame, k, up;
    Chang_to ='UP'
   if evol bes = spygame . K - Down!
         discussion
         Chang _ to = 1 DOWN
       If event , key = = Pysame k-LEFT.
          Change to ellety!
        if evol ice == Pysame, k-Right!
           Change to = 'RIGHT!
     # moung the struce
      if direction == !UP!
            snake - Postroom (1) -= 10
       if dream == 'DOWN!
             Stare _ restion Co] == 10
```

```
IF dreumn " = 'RIGHT ':
      maice - lostion (0) + = 10
 a proced body gracing methanisms
297032 Meth 9 Miles 2001072 Miles 25 Miles 915 Miles
at costs be incremented by 10.
snake body insortion (o, list (snake bisition))
ele:
   smoke - body - H()
   If not fluit - stoots:
 fact - slawn same
 game - window. All (black)
 for fos in snake - body;
   by some drow rec (some window, sien, Pysome , Rec (As(6), Pos(i), 10,0))
# Grame over wording
 if snake - Position (o) to or enake - lection (o) > windo w - x - lo;
   game_over ()
 if snake _ Position [i] to or snake - Position (i) > window _ Y-10;
   game - over()
# Touching the snake body
 for block in snake -body (1:):
   if smalle - Position (o) == block (o) and smalle - Position (i) == block(i);
     some or or
  # pertresh game screen
    ly some . distay , uldate ()
 # frame Per second (Refresh Pare
   fls . Ack (snake - speed)
```

Roblem 2. white a Pathon Program to povelof a chess Board using & same ALGONYHAM : 1. Import by same and intractive is a. see screen size and title 3. Define colors for the Board and Pieces. Define a furation to draw the boards by booling over house 270103 sessibility of various curves of different colors u. Define a function to draw the Pieces on the board by woods images for each frece and placing-term on the corresponding square. 5. Define the impar state of the board as a vist of list containing 6- Dieses -me board and Pieces on the screen. 7-590m the game look Program: Infort lygame thirdialize by some Py same, int () # Set the govern size and think sucen_ size = (cuo, 6ug) streen - Py, game, display, set _ mode (screen _ size) & some display set - caption ('these Board') # Define Goods black = (0,0,0) white = (255, 255, 255) brown = (153, 9610) the Define function to draw the board.

S, LHOTH, S. C. LOSIE



(i) sare drows i ec (same coindous si een, Pysame, eec (Asta) focti, intelligione

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(a)-1- anopura < (1) nortical - 2010/12 to a) (3 nortical _ 3 2) and 2)

Gorne - over ()

e parchine the choice body (i.g.,

it smake - lesition (a) == blow (a) and smake - valing if

0-6 grup

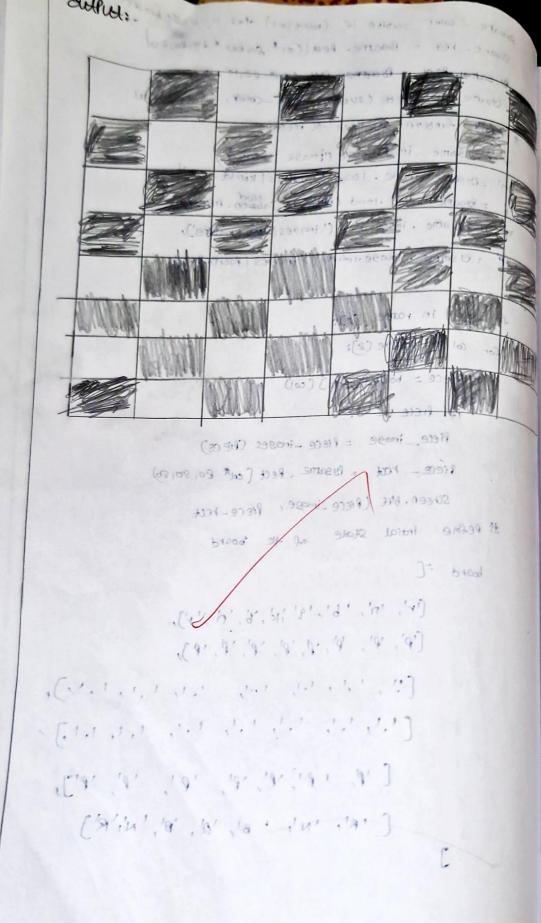
was aut years to

() some distry where

good Hearts Al Secret 19 small to

(been - exons) Aut , who

```
square - white if (not col) of = = = 0 ever bout
   Savare - Here = Procume - Rest ((0) 8 9,00 1 80,80,80
   by some feet = Province peck (cont 00100
     Governe, draw, text (succen, square -color, square -text)
 I pe fine function to draw the Pieces
   'r': Py same , image , logd ['image [ Mole. Pro"
   'n' - 12 same . imac . lood (' imases / lons et. Pro)
   If = Pagame. image. wood (1 images (gueen. Pro y,
  'q' = frome, image, read ('images ( tem king, fing'),
   if' : ly game . image wood ('images (factor fing)
3
   for now in range [8]:
    for col in range (8):
         Piece = board (row) (co)
         if liece 1 = 1.1
           fiece_image = liece -images (liece)
          frece - rad = frame, Rect ( colt for 80, 80, 80)
           screen. Hit (Piece impe, Prece-tect
    # perme indial state of the board
      board =[
              ['r', 'n', 'b', '2' 12', 'b', 'n', 'r'],
              ('p', p', p', p, 'p', 'p', 'p', 'p),
               [ (., (.), (.), (.), (.), (.), (.), (.)] >
                  [ 'P', 'P', 'P', 'P', 'P', 'P', 'P'],
                  ( R', 'N', B', 'Q', B', N', R')
```



thomaso board and pieces drase - board ()

draw_Pieres [boold]

and some me!

to even in typente. even sell.

if every tyle = = (y some out):

Barne, aut Ed

Bysame display . Ultake []

VEL TECH - CSE	
	12
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	1
RECORD (5)	
TOTAL (20)	12
SIGN WITH DAM	

Results- Thus the Program for Pysame is executed and ventured successfully.