Algorithm’s

ScreenMsg(screen,x,y,font,text,colour)

**BEGIN**

Text=font.render(text,colour)

Screen.blit(text,(x,y))

**END**

RectButton(screen,x,y,w,h,colour,events,text,font,fcolour)

**BEGIN**

Text=font.render(text,fcolour)

Draw.rect(screen,colour,(x,y,w,h))

rect=Rect(x,y,w,h)

screen.blit(text,(x+w/2-text.width()/2,y+h/2-text.height()/2))

**FOR** event=events[i] **TO** length(events):

**IF** event.type == Mouseclick():

**IF** rect.collision(mouse.pos())=True:

**RETURN** True

**ENDIF**

**ENDIF**

**NEXT i**

**RETURN** False

**END**

ImgButton(screen,img,x,y,events)

**BEGIN**

Screen.blit(img,(x,y))

Rect = py.rect(x,y,img.width(),img.height())

**FOR** event=events[i] **TO** length(events):

**IF** event.type == Mouseclick():

**IF** rect.collision(mouse.pos())=True:

**RETURN** True

**ENDIF**

**ENDIF**

**NEXT i**

**END**

Selectlevel()

**BEGIN**

Tick(10)  
 events=py.event.get()

**FOR** event=events[i] **TO** length(events):

**IF** event.type == Quit():

Pygame.quit()

**ENDIF**

**NEXT i**

Screen.fill(GRAY)

Counter=0

X=0

Y=0

**WHILE** X != 3:

**WHILE** Y != 5:

Counter=Counter+1

Click=rectbutton(screen,175+160\*y,300+100\*x,50,50,BLACK,events,str(cou),myfont,WHITE)

**IF** Click == True:

RETURN(Counter)

**END IF**

**END WHILE**

**END WHILE**

Pygame.display.flip()

**END**

Gamescreen(LevelNum, LevImageRes, LevImagePlay)

**BEGIN**

Tick(100)

Global PrevClickedResImg

Global PrevClickedRes

Global CorrectSpot

Global Score

events=py.event.get()

**FOR** event=events[i] **TO** length(events):

**IF** event.type == Quit():

Pygame.quit()

**ENDIF**

**NEXT i**

Screen.fill(GRAY)

Playcount=0

Tog1 = False

J1=0

J2=0

**While** J1 != 5:

**While** J2 != 5:

IF LevImagePlay[Playcount].img\_selected == False:

Tog1=imgbutton(screen,LevImagePlay[Playcount].image[LevImagePlay[Playcount].img\_count],LevImagePlay[Playcount].x,LevImagePlay[Playcount].y,events

**END IF**

**IF** LevImagePlay[Playcount].img\_selected == True:

tog1=imgbutton(screen,GreyBox,LevImagePlay[Playcount].x,LevImagePlay[Playcount].y,events)

**END IF**

**IF**  Tog1 == True:

if LevImagePlay[Playcount].img\_count == prevclickedResImg:

LevImagePlay[Playcount].img\_selected = False

LevImageRes[prevclickedRes].correct=True

Correctspot[prevclickedRes]=True

score=score+10

**END IF**

**ELSE**:

score=score-10

**END ELSE**

J2=J2+1

**END WHILE**

J1=J1+2

**END WHILE**

Tog=False

Coun=0

I1 =0

I2=0

**WHILE** I1 != 5:

**WHILE** I2 != 5:

**IF** LevImageRes[coun].img\_selected == False:

tog=imgbutton(screen,LevImageRes[coun].image[LevImageRes[coun].img\_count],LevImageRes[coun].x,LevImageRes[coun].y,events)

**END IF**

**IF** LevImageRes[coun].img\_selected == True **OR** LevImageRes[coun].correct==True:

screen.blit(GreyBox,(LevImageRes[coun].x,LevImageRes[coun].y))

**END IF**

**IF** tog == True:

LevImageRes[prevclickedRes].img\_selected = False

prevclickedRes=coun

prevclickedResImg=LevImageRes[coun].img\_count

LevImageRes[coun].img\_selected = True

**END IF**

I2=I2+1

**END WHILE**

I1=I1+1

**END WHILE**

ScreenMsg(screen,400,100,yfont,”Logic Puzzler”,ORANGE)

ScoreMsg=”Score: “ +score

ScreenMsg(screen,100,100,myfont,ScoreMsg,BLACK)

Py.display.flip()

**IF** all(correctspot) == True:

**IF** PrevClickedRes == 26:

**RETURN**(Score)

**END IF**

PrevclickedRes = 26

**END IF**

**RETURN**(-100000000000)

**END**

Scorescreen(score,scorel)

**BEGIN**

Tick(10)

**FOR** event=events[i] **TO** length(events):

**IF** event.type == Quit():

Pygame.quit()

**ENDIF**

**NEXT i**

Screen.fill(GRAY)

I=0

**WHILE** I != 5:

screenMsg(screen,100,100\*I,yfont,scorel[i],RED)

i=i+1

**END WHILE**

BTS=Rectbutton(screen,20,10,50,15,BLACK,events,”Back to Level’s”,yfont,ORANGE)

**IF** BTS == True:

**RETURN**(“BackToLevel”)

**END IF**

**END**

**Main()**

**BEGIN**

**IF** event == quit:

Pygame.quit

**END IF**

Txtbx.update(event)

Txtbx.draw(screen)

Name=txtbx.value

Start=imgbutton(screen,startbutt,350,100,events)

**IF** start == True **AND** name != “”:

Select=True

**END IF**

**IF**  start == True **OR** errorcount[0] == True **AND** name == “” and errorcount[0] != 100:

Errorcount[1] = True

screenMsg(screen, screen\_width/2, screen\_height/2, yfont, “INPUT A NAME”, ORANGE)

errorcount+=1

**END IF**

**if** errorcount[0] == 1000 **AND** errorcount[1] == True:

errorcount[0]=0

errorcount[1]=False

**END IF**

**WHILE** select **AND** levnum == 16:  
 **IF** event == quit:

Pygame.quit

**END IF**

Levnum=Selectlevel()

**END WHILE**

**IF** levnum != 16:

Imcount=[]  
 **FOR** i **TO** 25:

Imcount.append(i)

Random.shuffle(imcount)

Count=0

**FOR** i **TO** 5:

**FOR** j **TO** 5:

Levimagetemp=Images()

Add image to LevImageTemp.image

Set LevImageTemp.imagecount to count

Increment LevImageTemp.x with offset of 51

Increment LevImageTemp.y with offset of 51 plus 440

LevImageTemp.img\_selected=False

LevImageTemp add to Levimageres

Count+=1

**END FOR**

**END FOR**

Count=0

**FOR** i = 0 **TO** 5:

**FOR** j = 0 **TO** 5:

LevImageTemp=images()

Add image to LevImageTemp.image

Set LevImageTemp.imagecount to count

Increment LevImageTemp.x with offset of 51 plus 400

Increment LevImageTemp.y with offset of 51 plus 440

LevImageTemp.img\_selected=False

Add Levimagetemp to Levimageply

**END FOR**

**END FOR**

**WHILE** lvnum:

Gs=Gamescreen(Levnum,Levimageres,Levimageply)

**IF** gs != -100000:

Lvum=False

Gsgo=False

Create an array of arrays from the Scores.csv file

Check if the score is higher than atleast one of the existing scores, if so replace it and move on to next line