

3 a.**3.a.i.**

The purpose of the program is to entertain the user as well to teach certain objects that are related to the topic.

3.a.ii.

The program works by having user input which would select an option and from those options it would give the user a scenery and that option has a secret list that contains the items/ objects .. etc which the user would need to guess to find the villain. Once having five points or have three points into strikes. There are only three ways for the program to stop working which would be wining the game by gaining the five points, There is three points into strikes which would tell you that you lost, finally choosing option six gives you an option to end the program if the user wanted to.

3.a.iii.

the user inputs what item they are looking for and also what option they want to and output will print the result and give you a wining quote or a losing quote.

3 b.**3.b.i.**

```
listA = ["Math", "History", "Art", "English", "Science"]
listB = ["Earth", "Venus", "Mercury", "Neptune", "Saturn"]
listC = ["Sand", "Ocean", "BeachHome", "VollyBallCourt", "Hotel"]
listD = ["Room", "Bow", "Kitchen", "DiningRoom", "GangWay"]
listE = ["Kitchen", "Tables", "Curtains", "lobby"]

list_list = [listA, listB, listC, listD, listE]
def Mainprogram ():
    strikes = 0
    points = 0
    repeat1 = 0
    repeat2 = 0
    repeat3 = 0
    repeat4 = 0
    repeat5 = 0
```

```

listA = ["Math", "History", "Art", "English", "Science"]
listB = ["Earth", "Venus", "Mercury", "Neptune", "Saturn"]
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list_list = [listA, listB, listC, listD, listE]
def Mainprogram ():
    strikes = 0
    points = 0
    repeat1 = 0
    repeat2 = 0
    repeat3 = 0
    repeat4 = 0
    repeat5 = 0
    print( "Welcome To find the Villain! Please select one of the options to
chose a scenery. All scenery will be use to gain all the points to win")
    print("1. This option will start off at a school building")#option1 would
be location beach
    print("2. The villian was able to escape into space")#option 2 would be
location space
    print("3. The villian is hiding at a local beach ")#option 3 would be
location city
    print("4. This location would be on a boat")#opton 4 would be location
boat
    print("5. this will give you a_a cafe location!")#option 5 cafe
    print("6. option 6 will close the program!!") #option 6 will still close
program
    while True:

```

3.b.iii.

There are multiple lists names that are all correlated to different sections of the program. Each list within the program will be chosen once one of the options are chosen and it will be used for that option only. Each of the lists will only pop be used for the correlated option and its category.

3.b.iv.

The data within the lists will give you objects, buildings, planets, for the scenery that matches with the option you chose. Each of the list will be used to gain a points to be able to win the program, five points will win the game.

3.b.v.

The list complexes the program due to all of the elements within the list would need to be used until gaining five points or missing and gaining three points into strikes. If a list was not used the issue would have to be that the elements would separately give you if else statements that would make you code extremely long and would be a tedious task. The list is what the options require for the program would work to its best potential, and without it would make the program extremely unpleasant to use and everything would be unorganized to an extent.

3 c.
3.c.i.

```
def Mainprogram ():
    strikes = 0
    points = 0
    repeat1 = 0
    repeat2 = 0
    repeat3 = 0
    repeat4 = 0
    repeat5 = 0
    print( "Welcome To find the Villain! Please select one of the options to
    chose a scenery. All scenery will be use to gain all the points to win")
    print("1. This option will start off at a school building")#option1 would
    be location beach
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    boat
    print("5. this will give you a_a cafe location!")#option 5 cafe
    print("6. option 6 will close the program!!") #option 6 will still close
    program
    while True:
        if strikes == 3:
            print("sorry stone was able to escape from your grasp try again.")
            break
        if points == 5:
            print("you weeen")
            break
        user= int(input("chose one of the options from above!!! "))
        #repeat stops them from going back
        if user == 1:
            print("The villian is hiding near a school building all building
```

```

elif user == 5:
    print("The villian is cornered into a cafe ! ")
    user2 = input("Where would he be hiding within the cafe ")
    if repeat5 == 1:
        print("hamcking you cant do that")
    elif user2 in listE:
        points = points + 1
        print("points: " + str(points))
        repeat5 += 1
    else:
        strikes = strikes + 1
        print("strikes: " + str(strikes))

elif user == 6 :
    print("The program will now close thanks !!")
    break
else:
    print("thats not an option. ")

```

```

Mainprogram()

```

3.c.iii.

The procedure is what the program need to be able to use the options as well to see how many point will give you a wining ending or a losing ending. This procedure contributes to the function of the program by being the backbone of the entire program and holding everything.

3.c.iv.

The algorithm works by using a point system that once reached will end the game. There are three ways to end the program which would be wining the program or losing the program, or ending the program at the menu screen. There are five options that will each have a list connected to it and there are five elements in each list. The program has a while true loop to make sure that the points or strikes will end the game and also the program shall end once option to end the program if needed was used. Under the procedure if any element is typed in and it is not in one of elements within the five list the program will start to add points into strikes and once gaining enough end the program and giving you line about the fail. The menu is also what needs to be printed to give everyone their options about the program.

3 d.

3.d.i.

First call:

The first call of the procedure starts the program and will give the user multiple options to move forward within the program. This gives the user all options so that once the program is started the options will be the next step the user would need to use to end the program.

Second call:

The second call will give the options a key on the keyboard which will be numerical and start the game part of the program. This will give all the numerical options that are on the screen of the program a value and will connect you to a scenery that the user will need to be able to play to move on to another scenery by wining.

3 d.ii.

Condition(s) tested by first call:

The procedure will test that once at a certain point the program will due to the user wining, losing , or ending the program if the user would like to.

Condition(s) tested by second call:

The conditions tested were if a element was not part of the five lists it would give you a point into strikes and will start giving the user points to either win or lose the game part of the program.

3.d.iii.

Results of the first call:

the result of the first call will tell the user if you win or lose.

Results of the second call:

the result of the second call will give the user its option to play and win or lose or to end the program early.