COMPUTER PROGRAMMING REPORT

A. Pseudocode

1. Import “random” module
2. Define a list called “physics_questions” and add 10 physics question into list
3. Define a list called “physics_answers” and add physics questions’s answers
4. Define a list called “python_questions” and add 10 python question into list
5. Define a list called “python_answers” and add python questions’s answers
6. Define a list called “geo_questions” and add 10 geo question into list
7. Define a list called “geo_answers” and add geo questions’s answers
8. Define which_lessons() function and it needs “lesson_choice” variable
9. If lesson_choice is in that list ["P","p","Physics","physics"]
10. Return “physics”
11. Else if lesson_choice is in that list ["c","C","cp","Computer","Programming","p","P"]
12. Return “computer”
13. Else if lesson_choice is in that list ["Geo","G","g","geo","geography","Geography"]
14. Return “geography”

15. Define making_quiz() function and it needs “lesson,python_questions,python_answers ,geo_questions,geo_answers,physics_questions, physics_answers” variables
16. Define quizpoint ,it equals to 0
17. Define number_list as a list ,it is empty
18. If lesson is the same as “computer” string.
19. Add ordinal number to number_list repeat as the lenght of the python_questions
20. If lesson is the same as “geography” string.
21. Add ordinal number to number_list repeat as the lenght of the geo_questions
22. If lesson is the same as “physics” string.
23. Add ordinal number to number_list repeat as the lenght of the physics_questions
24. Repeat 5 times
25. If lesson same as the “computer”
26. Define question_number as a number chosen from the number_list
27. Remove question_number from number_list not to choose again
28. Print a question from python_question with question_number as a index
29. Define question answer with input and print “What is your answer?” inside the input
30. If question_answer is same or lower case as the python_answer’s in question_number index
31. Add 2 point to quizpoint

32. If question_answer is not same or lower case as the python_answer's in question_number index
33. Decrase 1 point from quizpoint
34. If lesson same as the "geography"
35. Define question_number as a number chosen from the number_list
36. Remove question_number from number_list not to choose again
37. Print a question from python_question with question_number as a index
38. Define question answer with input and print "What is your answer?" inside the input
39. If question_answer same or lower case as the geography_answer's in question_number index
40. Add 2 point to quizpoint
41. If question_answer is not same or lower case as the python_answer's in question_number index
42. Decrase 1 point from quizpoint
43. If lesson same as the "physics"
44. Define question_number as a number chosen from the number_list
45. Remove question_number from number_list not to choose again
46. Print a question from python_question with question_number as a index
47. Define question answer with input and print "What is your answer?" inside the input

48. If question_answer same or lower case as the physics_answer’s in question_number index
49. Add 2 point to quizpoint
50. If question_answer is not same or lower case as the python_answer’s in question_number index
51. Decrase 1 point from quizpoint
52. Return quizpoint
53. Define check_point function and it needs quizpoint variable.
54. If quzipoint is bigger than or equal to 5
55. Print “Your point” and quizpoint
56. Print "Congratulations!!\nYou passed the exam."
57. Else if quizpoint smaler than 5
58. Print "Your point" and quizpoint
59. Print "----------"
60. Print "You were not able to pass the exam\nYou have to make exam again."
61. Print "----------"
62. Define quizpoint with making_quiz() function and it needs lesson , python_questions, python_answers, geo_questions , geo_answers, physics_questions, physics_answers variables
63. If quzipoint is bigger than or equal to 5
64. Print “Your point” and quizpoint
65. Print "Congratulations!!\nYou passed the exam."
66. Else if quizpoint smaler than 5

67. Print "Your point" and quizpoint
68. Print "----------"
69. Print "You were not able to pass the exam\nYou have to make exam again."
70. Print "----------"
71. Define adding_question function and it needs lesson,python_questions,python_answers, geo_questions,geo_answers,physics_questions, physics_answers variables
72. If lesson is same as “computer”
73. Define add_question as a input function and write "Write a question:" inside the input
74. Define option1 as a input function and write "Option A:" inside the input
75. Define option2 as a input function and write "Option B:" inside the input
76. Define option3 as a input function and write "Option C:" inside the input
77. Define option4 as a input function and write "Option D:" inside the input
78. Define add_answer as a input and write “Write Answer:” inside the input
79. Define main_title as add_question ,”\n”,”A)”,option1,”B)”,option2,”C)”,option3,”D)”, option4
80. Append main_title to python_question
81. Append add_answer with upper function to python_answer
82. Else if lesson is same as “geography”

83. Define add_question as a input function and write "Write a question:" inside the input
84. Define option1 as a input function and write "Option A:" inside the input
85. Define option2 as a input function and write "Option B:" inside the input
86. Define option3 as a input function and write "Option C:" inside the input
87. Define option4 as a input function and write "Option D:" inside the input
88. Define add_answer as a input and write “Write Answer:” inside the input
89. Define main_title as add_question ,”\n”,”A)”,option1,”B)”,option2,”C)”,option3,”D)”, option4
90. Append main_title to geo_question
91. Append add_answer with upper function to geo_answer
92. Else if lesson is same as “physics”
93. Define add_question as a input function and write "Write a question:" inside the input
94. Define option1 as a input function and write "Option A:" inside the input
95. Define option2 as a input function and write "Option B:" inside the input
96. Define option3 as a input function and write "Option C:" inside the input
97. Define option4 as a input function and write "Option D:" inside the input

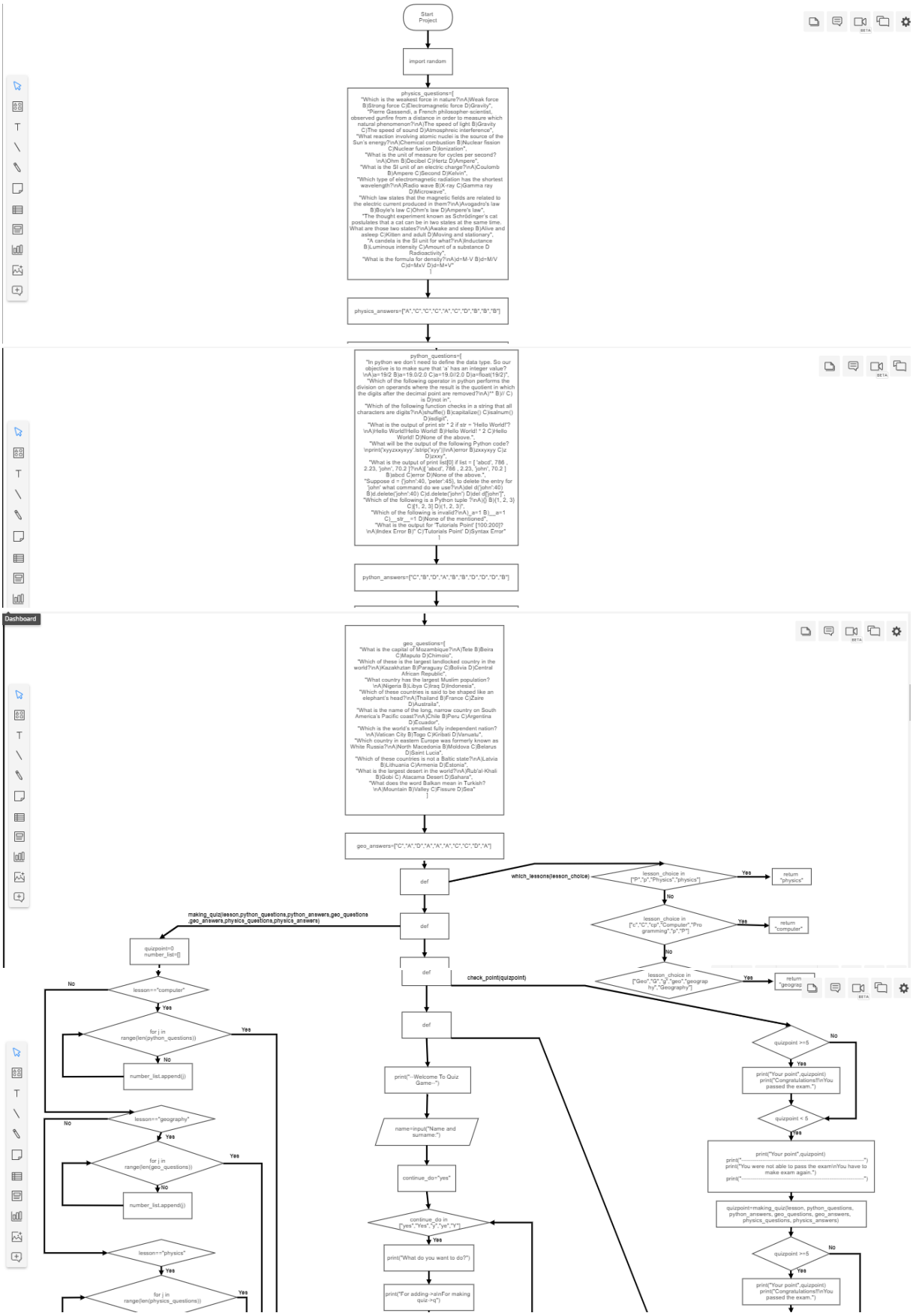
98. Define add_answer as a input and write “Write Answer:” inside the input
99. Define main_title as add_question ,”\n”,”A)”,option1,”B)”,option2,”C)”,option3,”D)”, option4
100. Append main_title to physics_question
101. Append add_answer with upper function to physics_answer
102. Open a file for appending.It’s name added.Question.txt.
103. Write main_title,”\nAnswer:” and add_answer to the file
104. Close the file
105. Print “Question added”

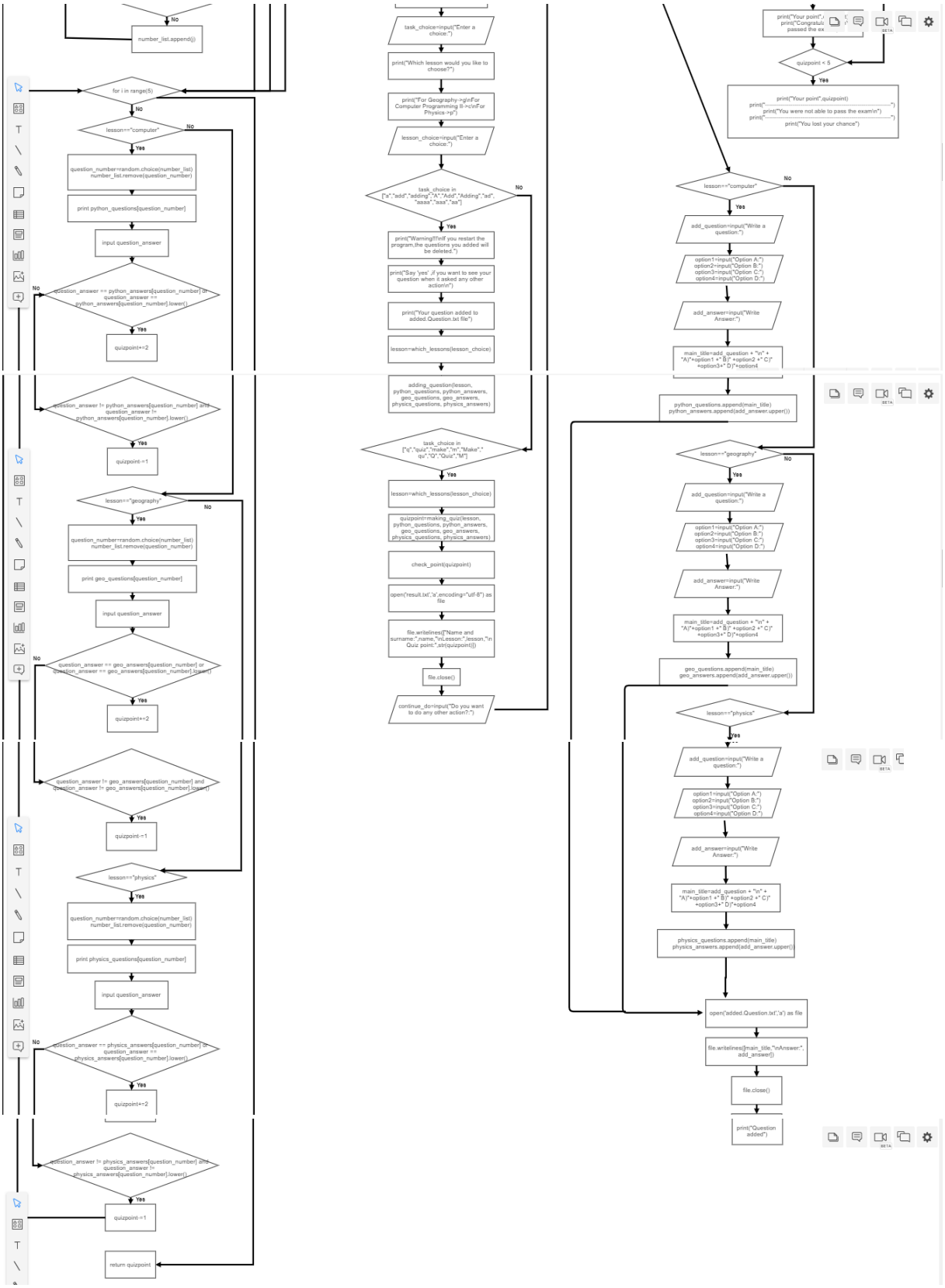
106. Print “--Welcome To Quiz Game—“
107. Define name as input function and write “Name and surname:” inside to input
108. Define continue_do as “yes”
109. While continue_do is in the ["yes","Yes","y","ye","Y"]
110. Print “What do you want to do?”
111. Print “For adding-> a\n For making quiz ->q”
112. Define task_choice as input function and write “Enter a choice:” inside the input
113. Print "Which lesson would you like to choose?"
114. Print "For Geography->g\nFor Computer Programming II->c\nFor Physics->p"

115. Define lesson_choice as input function and write “Write a choice:”
116. If task_choice is in ["a","add","adding","A","Add", "Adding","ad","aaaa","aaa","aa"]
117. Print "Warning!!!\nIf you restart the program,the questions you added will be deleted."
118. Print "Say 'yes' ,if you want to see your question when it asked any other action\n"
119. Print "Your question added to added.Question.txt file"
120. lesson is equal to which_lessons(lesson_choice)
121. quizpoint equal to making_quiz(lesson, python_questions, python_answers, geo_questions, geo_answers, physics_questions, physics_answers)
122. Use check_point() function and quizpoint is in the function
123. Open a file to append.It’s name is result.txt
124. Write “Name and surname:”,name, "\nLesson:",lesson,"\nQuiz point:"and quizpoint(with str() function) to file
125. Close the file
126. continue_do is equal to input function and write "Do you want to do any other action?:" inside the input

B. Flow Chart

Flow Chard link:
https://cacoo.com/diagrams/70K995ff2PUiW7fd/70986


Start Project
import random
physics_questions=[
"Which is the weakest force in nature?\nA)Weak force B)Strong force C)Electromagnetic force D)Gravity",
"Pierre Gassendi, a French philosopher-scientist, observed gunfire from a distance in order to measure which natural phenomenon?\nA)The speed of light B)Gravity C)The speed of sound D)Atmospheric interference",
"What reaction involving atomic nuclei is the source of the Sun's energy?\nA)Chemical combustion B)Nuclear fission C)Nuclear fusion D)Ionization",
"What is the unit of measure for cycles per second? \nA)Ohm B)Decibel C)Hertz D)Ampere",
"What is the SI unit of an electric charge?\nA)Coulomb B)Ampere C)Second D)Kelvin",
"Which type of electromagnetic radiation has the shortest wavelength?\nA)Radio wave B)X-ray C)Gamma ray D)Microwave",
"Which law states that the magnetic fields are related to the electric current produced in them?\nA)Avogadro's law B)Boyle's law C)Ohm's law D)Ampere's law",
"The thought experiment known as Schrödinger's cat postulates that a cat can be in two states at the same time. What are those two states?\nA)Awake and sleep B)Alive and asleep C)Kitten and adult D)Moving and stationary",
"A candela is the SI unit for what?\nA)Inductance B)Luminous intensity C)Amount of a substance D Radioactivity",
"What is the formula for density?\nA)d=M-V B)d=M/V C)d=MxV D)d=M+V"
]
physics_answers=["A","C","C","C","A","C","D","B","B","B"]
python_questions=[
"In python we don't need to define the data type. So our objective is to make sure that 'a' has an integer value? \nA)a=19/2 B)a=19.0/2.0 C)a=19.0//2.0 D)a=float(19/2)",
"Which of the following operator in python performs the division on operands where the result is the quotient in which the digits after the decimal point are removed?\nA)/** B)// C) is D)not in",
"Which of the following function checks in a string that all characters are digits?\nA)shuffle() B)capitalize() C)isalnum() D)isdigit",
"What is the output of print str * 2 if str = 'Hello World!'? \nA)Hello World!Hello World! B)Hello World! * 2 C)Hello World! D)None of the above.",
"What will be the output of the following Python code? \nprint('xyyzxxyxxyy'.lstrip('xyy'))\nA)error B)zxxyxxyy C)z D)zxxy",
"What is the output of print list[0] if list = ['abcd', 786 , 2.23, 'john', 70.2]?\nA)['abcd', 786 , 2.23, 'john', 70.2] B)abcd C)error D)None of the above.",
"Suppose d = {'john':40, 'peter':45}, to delete the entry for 'john' what command do we use?\nA)del d['john':40] B)d.delete('john':40) C)d.delete('john') D)del d['john']",
"Which of the following is a Python tuple ?\nA)() B)(1, 2, 3) C)[1, 2, 3] D)(1, 2, 3)",
"Which of the following is invalid?\nA) _a=1 B)__a=1 C)__str__=1 D)None of the mentioned",
"What is the output for 'Tutorials Point' [100:200]? \nA)Index Error B)'' C)'Tutorials Point' D)Syntax Error"
]
python_answers=["C","B","D","A","B","B","D","D","D","B"]
Dashboard
geo_questions=[
"What is the capital of Mozambique?\nA)Tete B)Beira C)Maputo D)Chimoio",
"Which of these is the largest landlocked country in the world?\nA)Kazakhstan B)Paraguay C)Bolivia D)Central African Republic",
"What country has the largest Muslim population? \nA)Nigeria B)Libya C)Iraq D)Indonesia",
"Which of these countries is said to be shaped like an elephant's head?\nA)Thailand B)France C)Zaire D)Australia",
"What is the name of the long, narrow country on South America's Pacific coast?\nA)Chile B)Peru C)Argentina D)Ecuador",
"Which is the world's smallest fully independent nation? \nA)Vatican City B)Togo C)Kiribati D)Vanuatu",
"Which country in eastern Europe was formerly known as White Russia?\nA)North Macedonia B)Moldova C)Belarus D)Saint Lucia",
"Which of these countries is not a Baltic state?\nA)Latvia B)Lithuania C)Armenia D)Estonia",
"What is the largest desert in the world?\nA)Rub'al-Khali B)Gobi C) Atacama Desert D)Sahara",
"What does the word Balkan mean in Turkish? \nA)Mountain B)Valley C)Fissure D)Sea"
]
geo_answers=["C","A","D","A","A","A","C","C","D","A"]
def
which_lessons(lesson_choice)
lesson_choice in ["P","p","Physics","physics"]
Yes
return "physics"
No
lesson_choice in ["c","C","cp","Computer","Programming","p","P"]
Yes
return "computer"
No
lesson_choice in ["Geo","G","g","geo","geography","Geography"]
Yes
return "geograp
def
making_quiz(lesson,python_questions,python_answers,geo_questions,geo_answers,physics_questions,physics_answers)
quizpoint=0
number_list=[]
lesson=="computer"
No
Yes
for j in range(len(python_questions))
Yes
No
number_list.append(j)
lesson=="geography"
No
Yes
for j in range(len(geo_questions))
Yes
No
number_list.append(j)
lesson=="physics"
Yes
for j in range(len(physics_questions))
Yes
def
check_point(quizpoint)
print("--Welcome To Quiz Game--")
name=input("Name and surname:")
continue_do="yes"
continue_do in ["yes","Yes","y","ye","Y"]
Yes
print("What do you want to do?")
print("For adding->a\nFor making quiz->q")
quizpoint >=5
No
Yes
print("Your point",quizpoint)
print("Congratulations!\nYou passed the exam.")
quizpoint < 5
Yes
print("Your point",quizpoint)
print("----------")
print("You were not able to pass the exam\nYou have to make exam again.")
print("----------")
quizpoint=making_quiz(lesson, python_questions, python_answers, geo_questions, geo_answers, physics_questions, physics_answers)
quizpoint >=5
No
Yes
print("Your point",quizpoint)
print("Congratulations!\nYou passed the exam.")


number_list.append(j)
for i in range(5)
lesson=="computer"
question_number=random.choice(number_list)
number_list.remove(question_number)
print python_questions[question_number]
input question_answer
question_answer == python_answers[question_number] or question_answer == python_answers[question_number].lower()
quizpoint+=2
question_answer != python_answers[question_number] and question_answer != python_answers[question_number].lower()
quizpoint-=1
lesson=="geography"
question_number=random.choice(number_list)
number_list.remove(question_number)
print geo_questions[question_number]
input question_answer
question_answer == geo_answers[question_number] or question_answer == geo_answers[question_number].lower()
quizpoint+=2
question_answer != geo_answers[question_number] and question_answer != geo_answers[question_number].lower()
quizpoint-=1
lesson=="physics"
question_number=random.choice(number_list)
number_list.remove(question_number)
print physics_questions[question_number]
input question_answer
question_answer == physics_answers[question_number] or question_answer == physics_answers[question_number].lower()
quizpoint+=2
question_answer != physics_answers[question_number] and question_answer != physics_answers[question_number].lower()
quizpoint-=1
return quizpoint
task_choice=input("Enter a choice:")
print("Which lesson would you like to choose?")
print("For Geography->g\nFor Computer Programming B->c\nFor Physics->p")
lesson_choice=input("Enter a choice:")
task_choice in ["a","add","adding","A","Add","Adding","ad","aaaa","aaa","aa"]
print("Warning!!!\nIf you restart the program,the questions you added will be deleted.")
print("Say 'yes' ,if you want to see your question when it asked any other action\n")
print("Your question added to added.Question.txt file")
lesson=which_lessons(lesson_choice)
adding_question(lesson, python_questions, python_answers, geo_questions, geo_answers, physics_questions, physics_answers)
task_choice in ["q","quiz","make","m","Make","qu","Q","Quiz","M"]
lesson=which_lessons(lesson_choice)
quizpoint=making_quiz(lesson, python_questions, python_answers, geo_questions, geo_answers, physics_questions, physics_answers)
check_point(quizpoint)
open('result.txt','a',encoding="utf-8") as file
file.writelines(["Name and surname:",name,"\nLesson:",lesson,"\nQuiz point:",str(quizpoint)])
file.close()
continue_do=input("Do you want to do any other action?:")
print("Your point",quizpoint)
print("Congratulations! You passed the exam\n")
quizpoint < 5
print("Your point",quizpoint)
print("You were not able to pass the exam\n")
print("You lost your chance")
lesson=="computer"
add_question=input("Write a question:")
option1=input("Option A:")
option2=input("Option B:")
option3=input("Option C:")
option4=input("Option D:")
add_answer=input("Write Answer:")
main_title=add_question + "\n" + "A)"+option1 +" B)" +option2 +" C)" +option3+" D)"+option4
python_questions.append(main_title)
python_answers.append(add_answer.upper())
lesson=="geography"
add_question=input("Write a question:")
option1=input("Option A:")
option2=input("Option B:")
option3=input("Option C:")
option4=input("Option D:")
add_answer=input("Write Answer:")
main_title=add_question + "\n" + "A)"+option1 +" B)" +option2 +" C)" +option3+" D)"+option4
geo_questions.append(main_title)
geo_answers.append(add_answer.upper())
lesson=="physics"
add_question=input("Write a question:")
option1=input("Option A:")
option2=input("Option B:")
option3=input("Option C:")
option4=input("Option D:")
add_answer=input("Write Answer:")
main_title=add_question + "\n" + "A)"+option1 +" B)" +option2 +" C)" +option3+" D)"+option4
physics_questions.append(main_title)
physics_answers.append(add_answer.upper())
open('added.Question.txt','a') as file
file.writelines([main_title,"\nAnswer:", add_answer])
file.close()
print("Question added")
Yes
No

C. Accomplishment
    1. I added writing quiz scores and added questions to txt file.
    2. Questions can be added, but they are not permanent. When the program is restarted, the added questions are deleted.
    3. I did not need to class structure.I could complete with list and functions.
    4. I defined lots of function for modularity.
D. Implementation
    1. I will explain how to program work
    2. It askes your name and surname for saving for your score with your name
    3. Then you need to write what do you want to do.For adding question write “a” or for making quiz write “q” but if user writes similar things he can keep playing
    4. You makes decides about lessons.You need to write “g” for geography,”c” for computer programing,”p” for physics.That decide is like last decide you can write similar thing.
    5. If you choose adding question.If you restart program added question will delete.
    6. Firstly,you need to write a question.Then,you will write option one by one.
    7. Finally,you will write answer.
    8. That informations will be added to an existing list
    9. Question will be added to txt and will be printed "Question added"
    10. Else if you choose making quiz it will make a list to show a question once
    11. Question will be displayed and you will write a answer.If it is correct.Your score increase 2 point or if it is not correct decrease 1 point.If you don’t write a answer won’t be anything.

12. End of the quiz,your score will be displayed.If you have 5 or more point you will pass or not you will make a quesiton again.That is last choice.
13. Your point will be added to a txt.
14. Finally,program will ask you do you want to do any other action?

E. Extra
    1. Added question and your scores will added to txt file.