

LAB REPORT

COURSE TITLE: Programming with Python

SUBMITTED TO : Abdullahil Kafi

Assistant Professor

Department of CSE, IIUC

SUBMITTED BY:

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SEMESTER : 4th

DEPARTMENT: Computer Science and Engineering

DATE OF SUBMISSION : 16th December, 2024.

REMARK:	

a) Create a multiple-choice quiz with 10 questions. Use a list of dictionaries to store each question, its answer choices, and the correct answer. It presents each question to the user and checks their responses, then provides a score at the end.

```
ifth.py - D:/VSCode/EDGE/fifth.py (3.12.3)

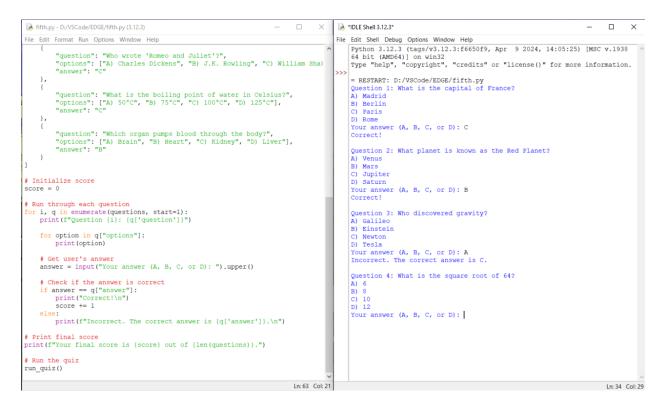
→ *IDLE Shell 3.12.3*

File Edit Format Run Options Window Help
                                                                                                                              File Edit Shell Debug Options Window Help
                                                                                                                                  Python 3.12.3 (tags/v3.12.3:f6650f9, Apr 9 2024, 14:05:25) [MSC v.1938 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
            "question": "Who wrote 'Romeo and Juliet'?",
            "options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sha} "answer": "C"
                                                                                                                                  = RESTART: D:/VSCode/EDGE/fifth.py
Question 1: What is the capital of France?
A) Madrid
B) Berlin
C) Paris
            "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
                                                                                                                                   Your answer (A, B, C, or D): C Correct!
            "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                                   Ouestion 2: What planet is known as the Red Planet?
# Initialize score
score = 0
                                                                                                                                    Your answer (A, B, C, or D):
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}"
      for option in g["options"]:
              rint (option)
      # Get user's answer
answer = input("Your answer (A, B, C, or D): ").upper()
      # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
             score += 1
           print(f"Incorrect. The correct answer is {q['answer']}.\n")
print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
run_quiz()
```

```
*IDLE Shell 3.12.3*
 iffth.pv - D:/VSCode/EDGE/fifth.pv (3.12.3)
                                                                                                                                                                                                                                                            File Edit Shell Debug Options Window Help

Python 3.12.3 (tags/v3.12.3:f6650f9, Apr 9 2024, 14:05:25) [MSC v.1938 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.
File Edit Format Run Options Window Help
             "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sha}
"answer": "C"
                                                                                                                                            = RESTART: D:/VSCode/EDGE/fifth.py
Question 1: What is the capital of France?
A) Madrid
B) Berlin
      },
             "question": "What is the boiling point of water in Celsius?", "options": ["A) 50^{\circ}C", "B) 75^{\circ}C", "C) 100^{\circ}C", "D) 125^{\circ}C"], "answer": "C"
                                                                                                                                             C) Paris
      },
              "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                                              Your answer (A, B, C, or D): C
Correct!
                                                                                                                                             Ouestion 2: What planet is known as the Red Planet?
      }
                                                                                                                                            A) Venus
B) Mars
C) Jupiter
D) Saturn
# Initialize score
                                                                                                                                              Your answer (A, B, C, or D): B
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}"
                                                                                                                                             Question 3: Who discovered gravity?
                                                                                                                                             A) Galileo
B) Einstein
      for option in g["options"]:
             print (option)
                                                                                                                                             Your answer (A, B, C, or D):
      # Get user's answer
answer = input("Your answer (A, B, C, or D): ").upper()
      # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
            print(f"Incorrect. The correct answer is {q['answer']}.\n")
# Print final score
 print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
run quiz()
                                                                                                                   Ln: 63 Col: 21
                                                                                                                                                                                                                                                           Ln: 26 Col: 29
```



```
ifth.py - D:/VSCode/EDGE/fifth.py (3.12.3)
                                                                                                                                *IDLE Shell 3.12.3*
                                                                                                                                                                                                                                             File Edit Shell Debug Options Window Help

Python 3.12.3 (tags/v3.12.3:f6650f9, Apr 9 2024, 14:05:25) [MSC v.1938 ^
64 bit (AMD64)] on win32

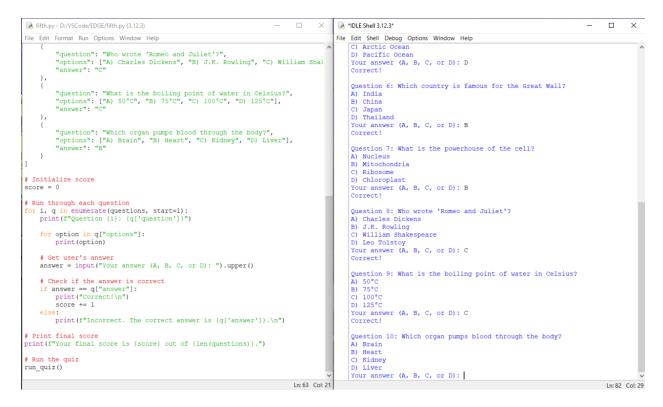
Type "help", "copyright", "credits" or "license()" for more information.
 File Edit Format Run Options Window Help
             "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Shak
"answer": "C"
                                                                                                                                     = RESTART: D:/VSCode/EDGE/fifth.py
Question 1: What is the capital of France?
A) Madrid
             "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
      },
                                                                                                                                     D) Rome
                                                                                                                                      Your answer (A, B, C, or D): C
               question": "Which organ pumps blood through the body?",
options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
answer": "B"
                                                                                                                                      Correct!
                                                                                                                                      Question 2: What planet is known as the Red Planet?
      1
                                                                                                                                     A) Venus
B) Mars
                                                                                                                                     C) Jupiter
D) Saturn
# Initialize score
                                                                                                                                      Your answer (A, B, C, or D): B
                                                                                                                                      Correct!
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}")
                                                                                                                                      Question 3: Who discovered gravity?
                                                                                                                                    A) Galileo
B) Einstein
C) Newton
      for option in q["options"]:
             print (option)
                                                                                                                                     Your answer (A, B, C, or D): A
Incorrect. The correct answer is C.
      answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                                      Question 4: What is the square root of 64?
      # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                                     A) 6
B) 8
                                                                                                                                     C) 10
                                                                                                                                     D) 12
                                                                                                                                     Your answer (A, B, C, or D): B Correct!
            print(f"Incorrect. The correct answer is {q['answer']}.\n")
# Print final score
                                                                                                                                     Question 5: Which is the largest ocean on Earth?
A) Atlantic Ocean
B) Indian Ocean
C) Arctic Ocean
 print(f"Your final score is (score) out of (len(questions)).")
# Run the quiz
                                                                                                                                     D) Pacific Ocean
Your answer (A, B, C, or D):
run quiz()
                                                                                                             Ln: 63 Col: 21
                                                                                                                                                                                                                                             In: 42 Col: 29
```

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*IDLE Shell 3.12.3*
                                                                                                                                                                                                                                  ifth.pv - D:/VSCode/EDGE/fifth.pv (3.12.3)
                                                                                                                                                                                                                                           ×
                                                                                                                          File Edit Shell Debug Options Window Help
File Edit Format Run Options Window Help
            "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sha}
"answer": "C"
                                                                                                                               C) Paris
D) Rome
                                                                                                                                Correct!
     },
                                                                                                                               Question 2: What planet is known as the Red Planet?
            "question": "What is the boiling point of water in Celsius?", "options": ["A) 50^{\circ}C", "B) 75^{\circ}C", "C) 100^{\circ}C", "D) 125^{\circ}C"], "answer": "C"
                                                                                                                              A) Venus
B) Mars
C) Jupiter
D) Saturn
     },
            "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                                   ar answer (A, B, C, or D): B
                                                                                                                               Question 3: Who discovered gravity?
                                                                                                                               A) Galileo
B) Einstein
C) Newton
D) Tesla
     }
# Initialize score
                                                                                                                               Your answer (A, B, C, or D): A
Incorrect. The correct answer is C.
score = 0
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}")
                                                                                                                               Question 4: What is the square root of 64?
                                                                                                                              A) 6B) 8
     for option in q["options"]:
                                                                                                                              C) 10
D) 12
            print (option)
                                                                                                                               Your answer (A, B, C, or D): B
                                                                                                                               Correct!
     answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                              Question 5: Which is the largest ocean on Earth?
A) Atlantic Ocean
B) Indian Ocean
C) Arctic Ocean
     # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                               Your answer (A, B, C, or D): D
Correct!
           print(f"Incorrect. The correct answer is {q['answer']}.\n")
# Print final score
                                                                                                                               Question 6: Which country is famous for the Great Wall?
                                                                                                                              A) India
B) China
C) Japan
 print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
run_quiz()
                                                                                                                               D) Thailand
                                                                                                                               Your answer (A, B, C, or D):
                                                                                                        Ln: 63 Col: 21
                                                                                                                                                                                                                                  In: 50 Col: 29
```

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ifth.py - D:/VSCode/EDGE/fifth.py (3.12.3)
                                                                                                                    🍌 *IDLE Shell 3.12.3*
                                                                                                                                                                                                                        File Edit Format Run Options Window Help
                                                                                                                    File Edit Shell Debug Options Window Help
            "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sha}
"answer": "C"
                                                                                                                             Jupiter
                                                                                                                         C) Jupiter
D) Saturn
                                                                                                                             ar answer (A, B, C, or D): B
                                                                                                                         Question 3: Who discovered gravity?
           "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
                                                                                                                        A) Galileo
B) Einstein
                                                                                                                         C) Newton
D) Tesla
     },
                                                                                                                         Your answer (A, B, C, or D): A
Incorrect. The correct answer is C.
            "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                         Question 4: What is the square root of 64?
     }
# Initialize score
score = 0
                                                                                                                         Your answer (A, B, C, or D): B
                                                                                                                         Correct!
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}".
                                                                                                                         Question 5: Which is the largest ocean on Earth?
                                                                                                                        B) Indian Ocean
     for option in q["options"]:
                                                                                                                         C) Arctic Ocean
                                                                                                                         D) Pacific Ocean
Your answer (A, B, C, or D): D
Correct!
           print (option)
     # Get user's answer
answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                         Question 6: Which country is famous for the Great Wall?
     # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                        A) India
B) China
C) Japan
D) Thailand
                                                                                                                         Your answer (A, B, C, or D): B
Correct!
     else:
           print(f"Incorrect. The correct answer is {q['answer']}.\n")
# Print final score
                                                                                                                         Question 7: What is the powerhouse of the cell?
print(f"Your final score is {score} out of {len(questions)}.")
                                                                                                                         A) Nucleus
                                                                                                                         B) Mitochondria
C) Ribosome
# Run the quiz
run quiz()
                                                                                                                         D) Chloroplast
                                                                                                                         Your answer (A, B, C, or D):
                                                                                                   Ln: 63 Col: 21
                                                                                                                                                                                                                       Ln: 58 Col: 29
```

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ifth.pv - D:/VSCode/EDGE/fifth.pv (3.12.3)
                                                                                                                         *IDI E Shell 3.12.3*
                                                                                                                                                                                                                                П
File Edit Format Run Options Window Help
                                                                                                                        File Edit Shell Debug Options Window Help
                                                                                                                              C) Newto
            "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sh
"answer": "C"
                                                                                                                              D) Tesla
                                                                                                                             Your answer (A, B, C, or D): A
Incorrect. The correct answer is C.
     },
                                                                                                                              Ouestion 4: What is the square root of 64?
            "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
                                                                                                                            A) 6
B) 8
                                                                                                                             C) 10
D) 12
     },
                                                                                                                              Your answer (A, B, C, or D): B Correct!
            "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                             Question 5: Which is the largest ocean on Earth?
A) Atlantic Ocean
B) Indian Ocean
C) Arctic Ocean
D) Pacific Ocean
     }
# Initialize score
                                                                                                                              Your answer (A, B, C, or D): D
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}")
                                                                                                                              Question 6: Which country is famous for the Great Wall?
                                                                                                                             A) India
B) China
     for option in q["options"]:
    print(option)
                                                                                                                             C) Japan
D) Thailand
                                                                                                                              Your answer (A, B, C, or D): B
     # Get user's answer
                                                                                                                              Correct!
      answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                              Question 7: What is the powerhouse of the cell?
     # Check if the answer is correct
                                                                                                                             A) Nucleus
     if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                             B) Mitochondria
                                                                                                                              C) Ribosome
D) Chloroplast
                                                                                                                              Your answer (A, B, C, or D): B
           print(f"Incorrect. The correct answer is {q['answer']}.\n")
                                                                                                                              Correct!
                                                                                                                             Question 8: Who wrote 'Romeo and Juliet'?
A) Charles Dickens
B) J.K. Rowling
C) William Shakespeare
# Print final score
print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
                                                                                                                             D) Leo Tolstoy
Your answer (A, B, C, or D):
run_quiz()
                                                                                                       In: 63 Col: 21
                                                                                                                                                                                                                               In: 66 Col: 29
```

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ifth.py - D:/VSCode/EDGE/fifth.py (3.12.3)
                                                                                                                      🍌 *IDLE Shell 3.12.3*
                                                                                                                                                                                                                           File Edit Format Run Options Window Help
                                                                                                                     File Edit Shell Debug Options Window Help
            "question": "Who wrote 'Romeo and Juliet'?",
"options": ["A) Charles Dickens", "B) J.K. Rowling", "C) William Sha}
"answer": "C"
                                                                                                                           C) 10D) 12
                                                                                                                               ur answer (A, B, C, or D): B
                                                                                                                           Question 5: Which is the largest ocean on Earth? A) Atlantic Ocean
            "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
                                                                                                                          B) Indian Ocean
C) Arctic Ocean
D) Pacific Ocean
     },
                                                                                                                           Your answer (A, B, C, or D): D
            "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                           Correct!
                                                                                                                           Question 6: Which country is famous for the Great Wall?
     }
                                                                                                                           A) India
                                                                                                                           B) China
# Initialize score
score = 0
                                                                                                                           Your answer (A, B, C, or D): B
                                                                                                                           Correct!
# Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question {i}: {q['question']}".
                                                                                                                           Question 7: What is the powerhouse of the cell?
                                                                                                                          A) Nucleus
B) Mitochondria
C) Ribosome
     for option in q["options"]:
                                                                                                                           D) Chloroplast
Your answer (A, B, C, or D): B
Correct!
            print (option)
     # Get user's answer
answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                           Question 8: Who wrote 'Romeo and Juliet'?
     # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                          A) Charles Dickens
B) J.K. Rowling
C) William Shakespeare
                                                                                                                           D) Leo Tolstoy
Your answer (A, B, C, or D): C
Correct!
     else:
           print(f"Incorrect. The correct answer is {q['answer']}.\n")
# Print final score
                                                                                                                           Question 9: What is the boiling point of water in Celsius?
print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
run quiz()
                                                                                                                           D) 125°C
                                                                                                                           Your answer (A, B, C, or D):
                                                                                                    Ln: 63 Col: 21
                                                                                                                                                                                                                         Ln: 74 Col: 29
```



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*fifth.py - D:/VSCode/EDGE/fifth.py (3.12.3)*
                                                                                                                                                   IDLE Shell 3.12.3
                                                                                                                              ×
File Edit Format Run Options Window Help
                                                                                                                                                   File Edit Shell Debug Options Window Help
Correct!
                                                                                                                                                        Question 6: Which country is famous for the Great Wall?
A) India
B) China
C) Japan
D) Thailand
Your answer (A, B, C, or D): B
Correct!
              "question": "What is the boiling point of water in Celsius?", "options": ["A) 50°C", "B) 75°C", "C) 100°C", "D) 125°C"], "answer": "C"
      },
{
               "question": "Which organ pumps blood through the body?",
"options": ["A) Brain", "B) Heart", "C) Kidney", "D) Liver"],
"answer": "B"
                                                                                                                                                          Question 7: What is the powerhouse of the cell?
                                                                                                                                                        Question 7: What is the poweric
A) Nucleus
B) Mitochondria
C) Ribosome
D) Chloroplast
Your answer (A, B, C, or D): B
Correct!
# Initialize score
score = 0
# Function to run the quiz
def run quiz():
    global score # Access the global score variable
                                                                                                                                                         Question 8: Who wrote 'Romeo and Juliet'?
                                                                                                                                                        Question 8: Who wrote 'Romeo an
A) Charles Dickens
B) J.K. Rowling
C) William Shakespeare
D) Leo Tolstoy
Your answer (A, B, C, or D): C
       # Run through each question
for i, q in enumerate(questions, start=1):
    print(f"Question (i): (q['question'])")
    for option in q['options"]:
        print(option)
                                                                                                                                                          Question 9: What is the boiling point of water in Celsius?
              # Get user's answer
answer = input("Your answer (A, B, C, or D): ").upper()
                                                                                                                                                        A) 50°C
B) 75°C
C) 100°C
D) 125°C
              # Check if the answer is correct
if answer == q["answer"]:
    print("Correct!\n")
    score += 1
                                                                                                                                                         Your answer (A, B, C, or D): C Correct!
                                                                                                                                                        Question 10: Which organ pumps blood through the body?
A) Brain
B) Heart
C) Kidney
D) Liver
Your answer (A, B, C, or D): B
Correct!
                    print(f"Incorrect. The correct answer is {q['answer']}.\n")
      # Print final score
print(f"Your final score is {score} out of {len(questions)}.")
# Run the quiz
run_quiz()
                                                                                                                                                         Your final score is 9 out of 10.
                                                                                                                             Ln: 60 Col: 52
                                                                                                                                                                                                                                                                                 Ln: 90 Col: 0
```