

Software Development Final Exams

Question 8

Suppose x is 1. What is x after $x += 2$?

- ☒ A 3
- ☐ B 4
- ☐ C 1
- ☐ D 2

Question 6

What is the value of the following expression?

$16 - 2 * 5 // 3 + 1$

- ☒ A 14
- ☐ B 3
- ☐ C 13.667
- ☐ D 24

Question 1

Which of the following is a relational operator?

- ☐ A `=<`
- ☒ B `<=`
- ☐ C `=`
- ☐ D All are relational operators

Question 2

```
number = 6
cost = number * 2
if cost < 8 :
    cost = 8
cost = cost + 2
print(cost)
```

What is displayed?

- ☐ A 6
- ☐ B 8
- ☐ C 12
- ☒ D 14

Question 10

Which error does not cause a program error, but produces incorrect results.

- ☐ (A) syntax
- ☐ (B) runtime
- ☒ (C) semantic

Question 4

Which of the following expression results in a value 1?

- ☐ (A) $15 \% 4$
- ☐ (B) $25 \% 5$
- ☒ (C) $37 \% 6$
- ☐ (D) $2 \% 1$

Question 5

What is the result of $45 / 4$?

- ☐ (A) 12
- ☒ (B) 11.25
- ☐ (C) 11
- ☐ (D) 10

Question 3

Python line comment begins with:

- ☐ (A) `$$`
- ☒ (B) `#`
- ☐ (C) `//`
- ☐ (D) `/*`

Question 7

What is printed by the Python code?

```
print('2' + '3')
```

- ☐ (A) 5
- ☐ (B) An error
- ☐ (C) '2' + '3'
- ☒ (D) 23

Question 3

Question - What is the output of the code snippet?

```
i = 0
while i != 9:
    print(i, end = " ")
    i = i + 2
```

- ☐ (A) No output
- ☐ (B) 10 12 14 16 (infinite loop)
- ☒ (C) 0 2 4 6 8 10 12 (infinite loop)
- ☐ (D) 0 2 4 6 8

Question 9

What is the keyword used after the try statement to handle exceptions?

- ☒ A except
- ☐ B catch
- ☐ C exception
- ☐ D throw

Question 6

What is the output of the following code?

```
def myFunc(message, num = 1):  
    print(message * num)
```

```
myFunc('Welcome')  
myFunc('Hello', 3)
```

- ☐ A Welcome
Hello,Hello,Hello
- ☒ B Welcome
HelloHelloHello
- ☐ C This code will cause an error
- ☐ D Welcome
Hello

Question 4

Question - What is the output of the code snippet ?

```
for i in range(1, 11):  
    print(i, end = " ")
```

- ☒ A 1 2 3 4 5 6 7 8 9 10
- ☐ B 1 2 3 4 5 6 7 8 9 10 11
- ☐ C 2 3 4 5 6 7 8 9 10 11
- ☐ D 2 3 4 5 6 7 8 9 10

Question 2

```
def nPrint(message, n):  
    while n > 0:  
        print(message)  
        n -= 1  
nPrint('a', 4)
```

What will be displayed?

- ☐ A aaaa
- ☐ B aaaaa
- ☐ C aaa
- ☒ D infinite loop

Question 4

Which is **true**?

- ☐ A A parameter is a value passed to a function when the function is called.
- ☐ B A parameter is always a global variable.
- ☐ C An argument is the variable listed inside the parentheses in a function definition
- ☒ D An argument is a value passed to a function when the function is called.

Question 9

What command correctly generates the sequence 2, 5, 8?

- ☐ A `range(2, 8, 3)`
- ☐ B `range(8, 1, -3)`
- ☐ C `range(2, 5, 8)`
- ☒ D `range(2, 10, 3)`

Question 1

```
x = 10
while x > 5:
    print("*")
    x = x - 2
```

Question - How many stars are displayed by the code snippet above?

- ☐ (A) 5
- ☒ (B) 3
- ☐ (C) 10
- ☐ (D) 4

Question 3

What will the following function return?

```
def addEm(x, y, z):
    print(x + y + z)
```

- ☐ (A) The value of $x + y + z$
- ☒ (B) None
- ☐ (C) The string 'x + y + z'

Question 2

```
sum = 2
while sum < 15:
    sum = sum + 3
    print("*")
```

Question - How many stars are displayed by the above code snippet?

- ☐ A 4
- ☐ B 13
- ☐ C 2
- ☒ D 5

Question 8

Question - Which of the following returns a sequence 0, 1, 2, 3?

- ☐ A None of these answers.
- ☐ B range(1, 2, 3, 4)
- ☒ C range(0, 4)
- ☐ D range(0, 3)

Question 7

Which statement is used to stop a loop?

- ☐ A exit
- ☐ B stop
- ☐ C return
- ☒ D break

How would you cast the string variable "a" that is equal to "2" into the integer 2?

- ☐ A integer(a)
- ☐ B castToInteger(a)
- ☒ C int(a)
- ☐ D castToInt(a)

Question 6

Question - What will be the output of the following code snippet?

```
token = False  
while token:  
    print('Hello')
```

- ☒ A No output.
- ☐ B None of these answers
- ☐ C 'Hello' will be displayed only once.
- ☐ D 'Hello' will be displayed infinite times.

Question 1

In Python, how do you create a variable "a" that is equal to 2?

- ☐ A int a = 2
- ☐ B variable a = 2
- ☐ C var a = 2
- ☒ D a = 2

Question 5

Question - What is printed?

```
for i in range(10, 12):  
    for j in range(2, 4):  
        print(i, j, end = " ")
```

- ☐ A 10 11 12 2 3 4
- ☐ B 10 2 11 3 10 2 11 3
- ☐ C 10 2 11 2 10 3 11 3
- ☒ D 10 2 10 3 11 2 11 3

Question 10

Which range function call will produce the sequence 20, 15, 10, 5?

- ☐ A range(20, 5, -5)
- ☐ B range(5, 25, 5)
- ☐ C range(20, 5, 4)
- ☒ D range(20, 3, -5)

Question 5

```
def test_range(n):  
    if n in range(1,11):  
        print(" in range")  
    else :  
        print("outside range.")
```

test_range(10)

Question 7

Which of the following function headers is valid?

- ☒ A def f(a, b = 1, c = 2):
- ☐ B def f(a = 1, b):
- ☐ C def f(a = 1, b, c = 2):
- ☐ D def f(a = 1, b = 1, c = 2, d):

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD 1 - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

Question 19 3 Points

```
marks = [15, 20, 5, 30, 10]  
print(marks[-1])
```

(A) Error

☒ (B) 10

(C) 15

(D) 30

Question 20 3 Points

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

75°F Mostly cloudy 1:41 PM 1/10/2023

Question 5

Which of the following is FALSE?

- ☐ A Dictionaries aren't ordered
- ☐ B The values of a dictionary can be accessed using keys
- ☐ C Dictionaries are mutable
- ☒ D The keys of a dictionary can be accessed using values

Question 5

Which of the following is FALSE?

- ☐ A Dictionaries aren't ordered
- ☐ B The values of a dictionary can be accessed using keys
- ☐ C Dictionaries are mutable
- ☒ D The keys of a dictionary can be accessed using values

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

What is the output of the following code?

```
for i in range(4, 6):  
    for j in range(2, 4):  
        print(i, j, end = " ")
```

(A) 4 2 5 3 4 2 5 3

(B) 4 2 4 3 5 2 5 3

(C) 4 5 6 2 3 4

(D) 4 2 5 2 4 3 5 3

Question 25 3 Points

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

Question 33 3 Points

Python & SQLite - Which function is used to execute a query?

(A) execute()

(B) commit()

(C) query()

(D) executequery()

Additional content

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

Question 22 3 Points

What sequence will this generate?
range(1, 11)

(A) 2 3 4 5 6 7 8 9 10 11

(B) 1 2 3 4 5 6 7 8 9 10

(C) 2 3 4 5 6 7 8 9 10

(D) 1 2 3 4 5 6 7 8 9 10 11

Question 23 3 Points

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

42 minutes remaining 0 OF 33 QUESTIONS REMAINING

Question 10 3 Points

What does the following code print?

```
if 9 > 11:
    print("a")
elif 9 != 9:
    print("b")
else:
    print("c")
```

(A) a b c

(B) c

(C) a

(D) b

Last saved 13:33:03

Questions Filter (33)

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

Which of the following will **NOT** cause an error?

☐ A s = 'Good day'
s[0] = 'F'

☒ B a = [2, 4, 5, 3, 6, 1]
a[0] = 9

☐ C b = (2, 5, 3, 1)
b[0] = 9

Question 18 3 Points

Which of the following are immutable (cannot be changed after creation)?

☐ A Lists

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

43 minutes remaining 0 OF 33 QUESTIONS REMAINING

Test Content

Question 1 3 Points

Python & SQLite - Which function is used to save a change permanently?

☒ A save()

☐ B commit()

☐ C execute()

☐ D close()

Question 2 3 Points

Last saved 13:33:03

Questions Filter (33)

Details & Information

Assessment due date
10/01/2023, 14:25 (UTC+5:30)

Time limit
60 minutes | Automatic submission

Attempts
1 attempt left

Marking

Maximum points	100 points
----------------	------------

Description
You have 60 minutes and your answers will be automatically submitted upon reaching 60 minutes

Save and Close Submit

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of Westminster | eLearning - IIT: Log... | chat openai | IIT Intranet | L4 Course Materials... | SD I - Google Drive | https://library-colle... | IEEE Xplore | Google Scholar | ScienceDirect.com |...

43 minutes remaining 0 OF 33 QUESTIONS REMAINING 3 Points

Question 2

What is the outcome of running this program?

```
def fun1(num):  
    return num + 12  
  
fun1(8)  
print(num)
```

(A) 8
(B) 20
(C) An error will occur
(D) 12

Last saved 13:33:03

Questions Filter (33)

Save and Close Submit

Activate Windows
Go to Settings to activate Windows.

View Assignment

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_1?courseId=_89621_1

University of Westminster | eLearning - IIT: Log... | chat openai | IIT Intranet | L4 Course Materials... | SD I - Google Drive | https://library-colle... | IEEE Xplore | Google Scholar | ScienceDirect.com |...

35 minutes remaining 0 OF 33 QUESTIONS REMAINING 3 Points

Question 32

You want to write a condition statement with multiple alternatives to print out the category of a mark entered by a user. What is wrong with the following?

```
if mark < 50:  
    print('Pass')  
if mark < 60:  
    print('Merit')  
if mark < 101:  
    print('Distinction')
```

(A) The condition statements will correctly print out the appropriate category.
(B) An else should always be included.
(C) The conditions are in the wrong order; the check for the highest bracket should be first.

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

Activate Windows
Go to Settings to activate Windows.

View Assignment x +

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_12?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

43 minutes remaining 0 OF 33 QUESTIONS REMAINING

Question 3 3 Points

What is the output of the following code?

```
for char in "Your Life":
    if char == " ":
        break
    if char == "r":
        continue
    print(char, end="")
```

☐ A Life

☒ B You

☐ C YourLife

☐ D Your

Last saved 13:33:03

Questions Filter (33)

Save and Close Submit

View Assignment x +

learning.westminster.ac.uk/ultra/courses/_89621_1/outline/assessment/_4277846_1/overview/attempt/_4603553_12?courseId=_89621_1

University of West... eLearning - IIT: Log... chat openai IIT Intranet L4 Course Materials... SD I - Google Drive https://library-colle... IEEE Xplore Google Scholar ScienceDirect.com [...]

35 minutes remaining 0 OF 33 QUESTIONS REMAINING

Which of the following expressions checks whether a value assigned to the **total** variable falls in the range 70 to 100?

☐ A total >= 100 and total <= 70

☐ B total >= 70 or total <= 100

☒ C total >= 70 and total <= 100

☐ D total >= 70 and <= 100

Question 29 4 Points

Match the code to the expected result

Prompts Submitted Answers

Last saved 13:41:15

Questions Filter (33)

Save and Close Submit

Question 10

What does the following code print?

```
if 5 > 10:  
    print("a")  
elif 8 != 9:  
    print("b")  
else:  
    print("c")
```

☒ A b

☐ B a

☐ C c

Question 4

Which of the following expressions checks whether a value for the **num** variable is either less than 100 or more than 200?

☒ A `num < 100 or num > 200`

☐ B `num <= 100 and num >= 200`

☐ C `num <= 100 or num >= 200`

☐ D `num < 100 and num > 200`

Question 1

What will be printed?

```
fruit = {"Banana": 10, "Apple": 20, "Watermelon": 30}
```

```
for item in fruit.keys():  
    print(item)
```

- ☒ **A** Banana
Apple
Watermelon
- ☐ **B** ('Banana', 10)
('Apple', 20)
('Watermelon', 30)
- ☐ **C** 10
20
30
- ☐ **D** {'Banana': 10, 'Apple': 20, 'Watermelon': 30}

Question 5

Suppose you want to write a condition statement with multiple alternatives to print out the single tax bracket that someone is in, based on their income. Assume the variable `income` holds the annual income. What is wrong with the following ?

```
if income < 10000:  
    print("Lowest tax bracket")  
if income < 20000:  
    print("Middle tax bracket")  
if income < 30000:  
    print("High tax bracket")
```

- ☐ **A** The conditions are in the wrong order; the check for the highest bracket should be first.
- ☒ **B** The conditions should use `elif` conditionals.
- ☐ **C** The condition statements will correctly print out the appropriate tax bracket.

Question 7

The Boolean logical operators are:

- ☐ A and, or, but
- ☐ B and, neither, nor
- ☐ C True, False
- ☒ D and, or, not

Question 8

The user enters 45. What is the output?

```
number = int(input("Please enter a number: "))  
if number < 100 :  
    number = number + 5  
if number < 500 :  
    number = number - 2  
if number > 15 :  
    number = number + 1  
else :  
    number = number - 1  
print(number)
```

- ☐ A 43
- ☐ B 105
- ☐ C 45
- ☒ D 49

Question 2

What will be printed?

```
fruit = {"Banana": 10, "Apple": 20, "Watermelon": 30}
```

```
for item in fruit.values():  
    print(item)
```

- ☐ A {'Banana': 10, 'Apple': 20, 'Watermelon': 30}
- ☒ B 10
20
30
- ☐ C Banana
Apple
Watermelon
- ☐ D ('Banana', 10)
('Apple', 20)
('Watermelon', 30)

Question 3

Which of the following expressions checks whether a value assigned to the **num** variable falls in the range 100 to 200?

- ☐ A num >= 200 or num <= 100
 - ☐ B num >= 200 and num <= 100
 - ☒ C num >= 100 and num <= 200
 - ☐ D num >= 100 or num <= 200
-

Question 3

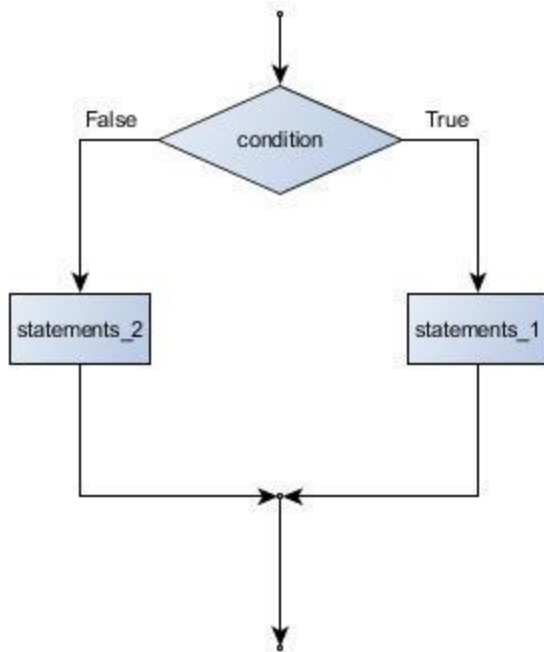
```
seats = {"LG.09":50, "LG.06":65}
```

What happens when retrieving a value using:

```
seats.get("LG.42")
```

- ☐ A Since "LG.42" is not a key an exception is raised.
- ☐ B Since "LG.42" is not a value an exception is raised.
- ☒ C No exception is raised and None is returned.

Question 9



- A** The above flow chart describes an *if else*
- B** The above flow chart describes an *if*
- C** The above flow chart describes an *elif*

Question 6

`x = 4`

`y = 5`

Which of the following is true?

☐ (A) `not (x == 4)`

☒ (B) `x != 5`

☐ (C) `x != 4`

☐ (D) `x == 5`

Question 4

`seats = {"LG.09":50, "LG.06":65}`

What happens when retrieving a value using:

`seats["LG.42"]`

☒ (A) Since "LG.42" is not a key an exception is raised.

☐ (B) No exception is raised and None is returned.

☐ (C) Since "LG.42" is not a value an exception is raised.