



PSU
PANGASINAN STATE UNIVERSITY
Region's Premier University of Choice

ELEC 4

SPECIAL TOPICS

ON WEB AND

MOBILE 2

PRESENTED TO

Mark Denver Adora

PRESENTED BY

Chrissha Mae E. Balbin

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ASSIGNMENT 1

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202320241S (IT-4B) ELEC 4 ...

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Assignment 1

Due October 16, 2023 11:59 PM

Points 25 / 25

Instructions

Please follow format for submission. Minus 5 for those who don't follow.

Reference materials

Assignment 1 - Midterm.docx

My work

ELEC4_4B_BALBIN_ASS1.pdf

Attach + New

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Angoshtan State University

Urdaneta City Campus

Assignment 1

Elective 4 (Special Topics on Web and Mobile 2)

Name: Balbin, Christina Mae E.

Date: October 11, 2023 | Deadline: October 16, 2023

Points: 25

Instructions:

1. Create a function to calculate the "mean" of a list of numbers.
 - Return "mean"
2. Create a function to calculate the "median" of a list of numbers.
 - Return "median"
3. Create a main function to get user input, calculate mean and median, and display results.
 - Ask positive integer inputs separated by spaces.
 - Split the given input.
 - Calculate the mean and median of the input.
 - Display the elements of the list, the mean, the median

Your code here...

```
def calculateMean(numList):  
    sum = 0  
    for n in numList:  
        sum += n  
    Mean = sum/len(numList)  
    return(Mean)  
  
def calculateMedian(numList):  
    n = len(numList)  
    sorted_numbers = sorted(numList)  
    if n % 2 == 0:  
        mid1 = n // 2  
        mid2 = sorted_numbers[mid1] + sorted_numbers[mid1 + 1] / 2  
    else:  
        mid1 = (n // 2) + 1  
        median = sorted_numbers[mid1]  
    return median
```

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6:00 PM 1/4/2024

LABORATORY QUIZ 1

3	Balbin, Chrissha Mae Espenueva	24
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WRITTEN QUIZ 1

24/26 No. _____ Date 10/02/23

BALBIN CHRISSHA MAE ELECT 4 - 9B

1) C.	11) .get()	21) .append()
2) C.	12) .keys()	22) .update()
3) G	13) False	23) .popitem()
4) A	14) .update()	24) .insert()
5) D	15) True	25) .enumerate()
6) D 1 point	16) False	
7) B	17) .count()	
8) B	18) True	
9) D	19) reverse = True	
10) H	20) last	

Corrected by : Hany Galvez

MIDTERM WRITTEN EXAM

Pangasinan State University
Urdaneta City Campus
MIDTERM WRITTEN EXAMINATION
Elective 4 (Special Topics on Web and Mobile 2)

46

Name: <u>BALBIN, CHRISTHA MAE</u>	Date: <u>10-23-22</u>
Year & Section: <u>9B</u>	Score: _____

Fill in the blanks: Any kind of measures are not allowed.

Managing Student Records

➤ Task 1: Create a Python script that defines an empty list called `student_records`. (2 points)

`student_records = []`

➤ Task 2: Create a function `add_student` that takes three parameters: `name`, `age`, and `grade`. This function should add a dictionary representing a student to the `student_records` list. (9 points)

```
def add_student (name, age, grade):  
    student = {"name": name, "age": age, "grade": grade}  
    student_records.append (student)
```

➤ Task 3: Add three students to the `student_records` list using the `add_student` function. (9 points)

`add_student ("Christha Mac", 20, "A")`
`add_student ("Marlon", 22, "B")`
`add_student ("Jomary Clarie", 22, "C")`

➤ Task 4: Create a function `print_students` that prints all the students and their information in the `student_records` list. Then check if the grade is 'A', print "Excellent"; B, print "Best", C, print "Good". (20 points)

```
def print_students():  
    for student in student_records:  
        if student["grade"] == "A":  
            print(f"Name: {student["name"]}, Age: {student["age"]}, Grade: Excellent")  
        elif student["grade"] == "B":  
            print(f"Name: {student["name"]}, Age: {student["age"]}, Grade: Best")  
        elif student["grade"] == "C":  
            print(f"Name: {student["name"]}, Age: {student["age"]}, Grade: Good")
```

➤ Task 5: Print the list of students and their information using the `print_students` function. (1 point)


`print_students()`

➤ Task 6: The output of Task 5. (9 points)

Name: <u>Christha Mac</u>	Age: <u>20</u>	Grade: <u>Excellent</u>
Name: <u>Marlon</u>	Age: <u>22</u>	Grade: <u>Best</u>
Name: <u>Jomary Clarie</u>	Age: <u>22</u>	Grade: <u>Good</u>

MARK DENVER P. ADDRA

MIDTERM LABORATORY EXAM

	
Pangasinan State University Urdaneta City Campus	
MIDTERM LABORATORY EXAM	
Elective 4 (Special Topics on Web and Mobile 2)	
Name: <u>Christha Mac Balbin</u>	Date: <u>October 16, 2023</u>
Points: 40	
<p>3 > Define the 'address_book' as a list of dictionaries. (Place inside main)</p> <p>1 > Function 'addContacts()' to add a contact to the address book (placed in another file: add_contact.py).</p> <p>9 > Function 'viewContacts()' to view all contacts in the address book (placed in another file: view_contacts.py).</p> <p>9 > Function 'searchContact()' to search for a contact by name (placed in another file: search_contact.py).</p> <p>> On the main program, display a menu for address book menu. The program will ONLY terminate if the input is '4'.</p> <p>2 • 1. Add Contact – If the input is 1, the program will ask for a name, email, and phone number. Display 'Contact added successfully' once done.</p> <p>2 • 2. View Contacts – If the input is 2, the program will display all the contacts in the address book.</p> <p>2 • 3. Search Contact – If the input is 3, the program will ask a search value (not case sensitive) which is the name, if name is found, display details otherwise, display 'Name not found.'</p> <p>1.5 • 4. Quit – If the input is 4, display 'Program Terminated. Thank you!' and terminates the program.</p> <p>1.5 • If input is not 1,2,3, or 4, display 'Invalid choice. Please select a valid option.'</p>	

ACTIVITY 1 (FINALS)

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Activity 1 Finals

Due November 8, 2023 11:59 PM • Closes November 8, 2023 11:59 PM

Points 20 / 20

Instructions

Instruction:

Follow the fileformat for submission. -5 for those who doesn't follow.

Reference materials

Activity 1 Finals.docx

My work

ELEC4_4B_BALBIN_ACT1FINALS 1.pdf

89°F Haze

Search

6:03 PM 1/4/2024

Try the new Teams

Search

ELEC4_4B_BALBIN_ACT1FINALS 1.pdf

Close

Your code here...

```
import array

arrayOfScores = array.array('i')
grade_list = []
sum = 0

def askvalue():
    while True:
        num = int(input("Enter positive values only: "))
        if num <= 0:
            break
        arrayOfScores.append(num)

askvalue()

for score in arrayOfScores:
    if score >= 75 and score <= 80:
        print("Score: ", score, "Grade: 3.00")
    elif score >= 65 and score <= 70:
        print("Score: ", score, "Grade: 3.50")
    elif score >= 55 and score <= 60:
        print("Score: ", score, "Grade: 3.75")
    elif score >= 45 and score <= 50:
        print("Score: ", score, "Grade: 4.00")
    elif score >= 35 and score <= 40:
        print("Score: ", score, "Grade: 4.50")
    elif score >= 25 and score <= 30:
        print("Score: ", score, "Grade: 5.00")

def main():
    print("Score: ", score, "Failed")
    if score > 75:
        grade_list.append(score)

    print("Elements of the list: ")
    for i in grade_list:
        print(i)

    average = sum(grade_list)/len(grade_list)
    print("Average: ", average)
```

Output:

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ACTIVITY 2 (FINALS)

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Activity 2 Finals

Due December 13, 2023 11:59 PM • Closes December 13, 2023 11:59 PM

Points 20 / 20

Instructions

KINDLY READ INSTRUCTIONS.

Upload your source code and a screenshot of your workspace. Follow the filename format (-5 if not followed).

Reference materials

Activity 2 Finals.docx

My work

ELECT4_4B_BALBIN_ACT2FINALS.py

ELEC4_4B_BALBIN_ACT2FINALS.pdf

ELEC4_4B_BALBIN_ACT2FINALS.png

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Try the new Teams

Search

Teams

ELEC4_4B_BALBIN_ACT2FINALS.pdf

Close

Your code here...

```
import array\n\ndef get_array():\n    array = array.array('i')\n    while True:\n        value = int(input("enter an input: "))\n        return value\n    \n    for i in range(10):\n        user_input = str(input())\n        except ValueError:\n            print("error: input must be an integer")\n        except KeyboardInterrupt:\n            print("error: input must be an integer")\n        else:\n            array.append(user_input)\n    finally:\n        print("done processing")\n        print(array)
```

Output...

2 of 3

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6:07 PM 1/4/2024

FINAL WRITTEN EXAM

Pangasinan State University
Urdaneta City Campus
FINAL WRITTEN EXAM
Elective 4

39

General Instruction:
Any kind of erasures is strictly prohibited.

1. Multiple Choice: Choose the correct answer by shading circle.

1. What is the purpose of the return statement in a function?

☐ a. To print a value ☐ b. To terminate the function ☒ c. To return a value from the function ☐ d. To define a variable

2. What is the scope of a variable defined inside a function?

☐ a. Global scope ☒ b. Local scope ☐ c. Both global and local scope ☐ d. Class Scope

3. What is a characteristic of a set in Python?

☐ a. Ordered ☐ b. Allows duplicate elements ☐ c. Immutable ☒ d. Unordered and does not allow duplicate elements

4. How do you add an element to a set in Python?

☒ a. Using the 'add' method ☐ b. Using the 'insert' method ☐ c. Using the 'append' method ☐ d. Using the 'update' method

5. What is the main difference between a list and an array in Python?

☒ a. Lists can store different data types, while arrays cannot. ☐ b. Arrays can store different data types, while lists cannot. ☐ c. Lists are mutable, while arrays are immutable. ☐ d. Arrays are more efficient for numerical operations than lists.

6. How can you find the length of an array in Python?

☐ a. Using the 'length' method ☐ b. Using the 'size' method ☒ c. Using the 'len' function ☐ d. Using the 'count' function

7. What will the following code output?

```
my_set = {1, 2, 3}
my_set.add(3)
print(len(my_set))
```

☐ a. 1 ☐ b. 2 ☒ c. 3 ☐ d. 4

8. Which of the following is a valid way to define a function in Python?

☐ a. def my_function() ☐ b. function my_function(): ☒ c. def my_function(): ☐ d. method my_function():

9. How do you remove a specific element from a set in Python?

☒ a. remove() ☐ b. discard() ☐ c. delete() ☐ d. pop()

10. How do you access the elements of an array in Python?

☐ a. Using () ☒ b. Using [] ☐ c. Using () ☐ d. Not applicable

11. What is the purpose of the try block in a try-except statement in Python?

☐ a. It contains the code that always executes. ☒ b. It contains the code that may raise an exception. ☐ c. It is used to define a function. ☐ d. It is not necessary in a try-except statement.

12. In Python, what is an exception?

☒ a. An error that stops the program. ☐ b. A standard Python function. ☐ c. A warning message. ☐ d. A type of loop.

13. What keyword is used to handle multiple exceptions in a single except block?

☐ a. catch ☒ b. except ☐ c. handle ☐ d. else

14. Which mode is used to open a file for reading in Python?

☒ a. 'r' ☐ b. 'w' ☐ c. 'a' ☐ d. 'o'

15. What method is used to read the entire content of a file as a string in Python?

☐ a. read() ☐ b. readlines() ☐ c. read_text() ☐ d. read_all()

Pangasinan State University
Urdaneta City Campus
FINAL WRITTEN EXAM
Elective 4

12. What is recursion in Python?

☐ a. A type of loop ☒ b. A function that calls itself ☐ c. A module for handling exceptions ☐ d. A method for reading files

13. What is the base case in a recursive function?

☒ a. The case where the function falls ☐ b. The case where the function calls itself ☐ c. The case where the function returns a value without calling itself ☐ d. The case where the function raises an exception

14. What is the purpose of the finally block in a try-except statement?

☐ a. To catch exceptions ☐ b. To define the main program logic ☒ c. To always execute code, whether an exception is raised or not ☐ d. To ignore exceptions

15. How do you open a file in Python for appending?

☐ a. open("file.txt", "r") ☐ b. open("file.txt", "w") ☒ c. open("file.txt", "a") ☐ d. open("file.txt", "x")

16. Output Tracing (20 points)

```
even_numbers = set(range(2, 11, 2))
return even_numbers

def manipulate_set(input_set):
    odd_numbers = set(range(1, 11, 2))
    input_set.update(odd_numbers)

my_set = create_set()
print("Step 1:", my_set)
```

Output: `Step 1: {2, 4, 6, 8, 10}`

```
manipulate_set(my_set)
print("Step 2:", my_set)
```

Output: `Step 2: {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}`

```
my_set.add(12)
print("Step 3:", my_set)
```

Output: `Step 3: {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12}`

```
my_set.remove(3)
print("Step 4:", my_set)
```

Output: `Step 4: {1, 2, 4, 5, 6, 7, 8, 9, 10, 12}`

element_to_check = 8
if element_to_check in my_set:
 print(f"Step 5: (element_to_check) is in the set.")
else:
 print(f"Step 5: (element_to_check) is not in the set.")

Output: `Step 5: 8 is in the set.`

END-TERM REQUIREMENT

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End Term Requirement

Due December 29, 2023 11:59 PM • Closes December 29, 2023 11:59 PM

Points 88 / 100

Rubric Elective 4 System Presentation Rubrics

Instructions Upload your source code in ZIP format following the filename format. (-5 for not following the filename format). Presentation will be on December 18 or December 20 2023.

Reference materials

End Term Requirement.docx

My work

ELEC4_4B_BALBIN_END_TERM_REQUIREMENT.zip

ELEC4_4B_BALBIN_PORTFOLIO_1.png

ELEC4_4B_BALBIN_PORTFOLIO_2.png

ELEC4_4B_BALBIN_PORTFOLIO_3.png

Turned in Wed Dec 27, 2023 at 12:31 PM

Elective 4 System Presentation Rubrics

Total: 88/100

User Interface Design Weight 30%

Excellent 5 points Exceptionally intuitive and aesthetically pleasing interface. Highly consistent and user-friendly.	Best 4 points Very intuitive and user-friendly interface. Consistent design throughout.	Good 3 points Clear and user-friendly interface. Consistency in design elements.	Fair 2 points It has a somewhat intuitive interface. Some consistency issues.	Poor 1 point Unintuitive and poorly designed interface. Inconsistent and confusing elements.
--	--	---	--	---

Functionality Weight 30%

Excellent 5 points All core functionalities demonstrated flawlessly. Robust	Best 4 points All core functionalities were demonstrated seamlessly and	Good 3 points Core functionalities demonstrated effectively but limited	Fair 2 points Some core functionalities demonstrated but	Poor 1 point Core functionalities are not demonstrated or fail to meet
--	--	--	---	---

Close

Elective 4 System Presentation Rubrics

Total: 88/100

Consistency Weight 20%

Excellent 5 points Code follows a consistent style throughout, adhering to established conventions.	Best 4 points Minor inconsistencies, but overall adherence to a defined coding style.	Good 3 points Some inconsistencies present, affecting readability.	Fair 2 points Significant inconsistencies, making the code hard to follow.	Poor 1 point Lack of any coding style.
--	--	---	---	---

Delivery Skills/Presentation Weight 20%

Excellent 5 points The presenter demonstrates exceptional verbal and non-verbal	Best 4 points The presenter communicates effectively but may exhibit minor	Good 3 points The presenter's communication is generally acceptable but may lack polish or	Fair 2 points The presenter struggles to convey ideas coherently, impacting overall	Poor 1 point The presenter's communication is unclear, disorganized, or hesitant.
--	---	---	--	--

Close

