

Michael Bullock

Python on AWS

September 28, 2024

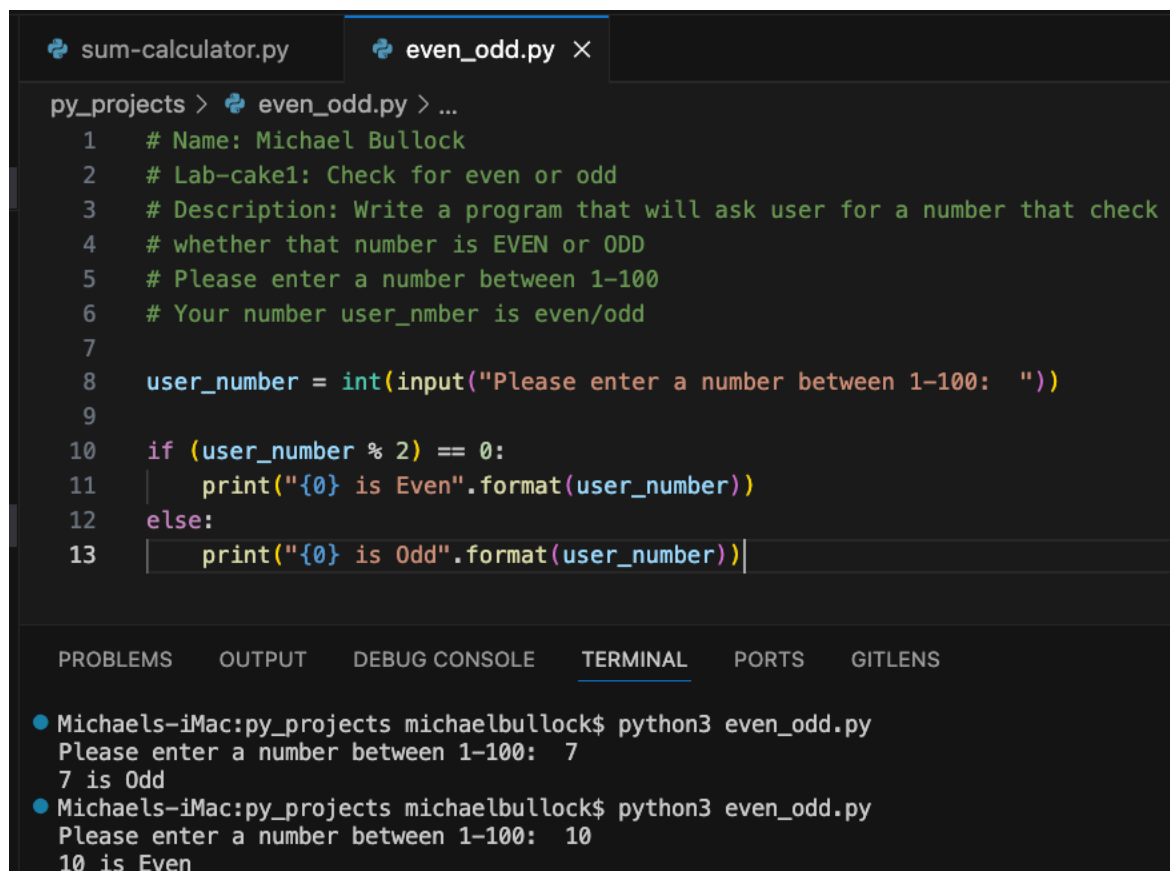
Lab-cake1: Check for even or odd

Write a program that will ask user for a number than check whether that number is EVEN or ODD.

Display on the screen:

Please enter a number between 1-100.

Your number `user_number` is `even/odd`.



The screenshot shows a code editor with two tabs: 'sum-calculator.py' and 'even_odd.py'. The 'even_odd.py' tab is active, displaying a Python script. The script includes comments for the author's name, the lab name, a description, and instructions for the user. The code uses the `input()` function to get a number, converts it to an integer, and then uses a modulo operation (`% 2`) to check if it's even or odd. The output is formatted using `print()` with `.format()`. Below the code editor, the 'TERMINAL' tab is active, showing two execution runs. The first run shows the user entering '7' and the program outputting '7 is Odd'. The second run shows the user entering '10' and the program outputting '10 is Even'.

```
py_projects > even_odd.py > ...
1  # Name: Michael Bullock
2  # Lab-cake1: Check for even or odd
3  # Description: Write a program that will ask user for a number that check
4  # whether that number is EVEN or ODD
5  # Please enter a number between 1-100
6  # Your number user_nmber is even/odd
7
8  user_number = int(input("Please enter a number between 1-100: "))
9
10 if (user_number % 2) == 0:
11     print("{0} is Even".format(user_number))
12 else:
13     print("{0} is Odd".format(user_number))
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

- Michaels-iMac:py_projects michaelbullock\$ python3 even_odd.py
Please enter a number between 1-100: 7
7 is Odd
- Michaels-iMac:py_projects michaelbullock\$ python3 even_odd.py
Please enter a number between 1-100: 10
10 is Even

Lab-cake2: grade-calculator.py

Write a program that will ask a student for a their grade in 5 subjects.

Calculate your average grade and print grade from A-E.

A > 90

B > 80

C > 70

D > 60

E == Failed ☹

Display on the screen: Provide the screenshot and github link.
Submit your homework in your github account as well. Create a folder Python-codes

```
py_projects > even_odd.py  grade_calculator.py ×
py_projects > grade_calculator.py > ...
Michael Bullock, 11 minutes ago | 1 author (Michael Bullock)
1  # Name: Michael Bullock
2  # Lab-cake1: Check for even or odd
3  # Description: Write a program that will ask a student for their grade in 5 subjects
4  # Calculate your average grade and print grade from A - E.
5
6  math_grade = float(input("Please enter math grade: "))
7  english_grade = float(input("Please enter english grade: "))
8  spanish_grade = float(input("Please enter spanish grade: "))
9  history_grade = float(input("Please enter history grade: "))
10 economics_grade = float(input("Please enter economics grade: "))
11
12 grade_average = (math_grade + english_grade + spanish_grade + history_grade + economics_grade) / 5
13
14 print(f"Your grade average is: {grade_average:.2f}")
15
16 if grade_average >= 90:
17     print("Your grade is A")
18 elif grade_average >= 80 and grade_average < 90:
19     print("Your grade is B")
20 elif grade_average >= 70 and grade_average < 80:
21     print("Your grade is C")
22 elif grade_average >= 60 and grade_average < 70:
23     print("Your grade is D")
24 else:
25     print("Your grade is E == FAILED :( ")
Michael Bullock, 11 minutes ago • Adding control flow
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
● Michaels-iMac:py_projects michaelbullock$ python3 grade_calculator.py
Please enter math grade: 94
Please enter english grade: 89
Please enter spanish grade: 94
Please enter history grade: 98
Please enter economics grade: 79
Your grade average is: 90.80
Your grade is A
● Michaels-iMac:py_projects michaelbullock$ python3 grade_calculator.py
Please enter math grade: 77
Please enter english grade: 50
Please enter spanish grade: 52
Please enter history grade: 53
Please enter economics grade: 51
Your grade average is: 56.60
Your grade is E == FAILED :(
```

Lab-cake 3: age-group-categorization.py

Prompt the user to enter their age as an integer.

Based on the input, categorize the person into one of the following life stages:

Infant: 0 - 1 year

Toddler: 2 - 3 years

Child: 4 - 12 years

Teenager: 13 - 19 years

Adult: 20 - 64 years

Senior: 65 years and older

Display the appropriate life stage.


If the user enters a negative number or a non-realistic number (e.g., more than 150), display an "Invalid age" message.

Display on the screen: Provide the screenshot and github link.

Submit your homework in your github account as well. Create a folder Python-codes

```
age-group-categorization.py x
py_projects > age-group-categorization.py > ...
Michael Bullock, 18 minutes ago | 1 author (Michael Bullock)
1  # Name: Michael Bullock
2  # Class: Python on AWS
3  # Lab3: aws-account-id.py
4  # Prompt the user to enter their age as an interger and display the appropriate life stage.
5  # If the user enters a negative number or a non-realistic number (e.g., more than 150).
6  # display an "Invalid age" message.
7
8  user_age = int(input("Please enter you current age: "))
9
10 print(f"You entered : {user_age}")
11
12 if user_age == 0 or user_age == 1:
13     print("Your current life stage is Infant")
14 elif user_age == 2 or user_age == 3:
15     print("Your current life stage is Toddler")
16 elif user_age >= 4 and user_age <= 12:
17     print("Your current life stage is Child")
18 elif user_age >= 13 and user_age <= 19:
19     print("Your current life stage is Teenager")
20 elif user_age >= 20 and user_age <= 64:
21     print("Your current life stage is Adult")
22 elif user_age >= 65 and user_age <= 150:
23     print("Your current life stage is Senior")
24 else:
25     print("Invalid age")
Michael Bullock, 18 minutes ago • Adding control flow projects
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

 bash - p

```
● Michaels-iMac:py_projects michaelbullock$ python3 age-group-categorization.py
Please enter you current age: 42
You entered : 42
Your current life stage is Adult
● Michaels-iMac:py_projects michaelbullock$ python3 age-group-categorization.py
Please enter you current age: -1
You entered : -1
Invalid age
● Michaels-iMac:py_projects michaelbullock$ python3 age-group-categorization.py
Please enter you current age: 155
You entered : 155
Invalid age
```