

CONTROL – FLOW LAB

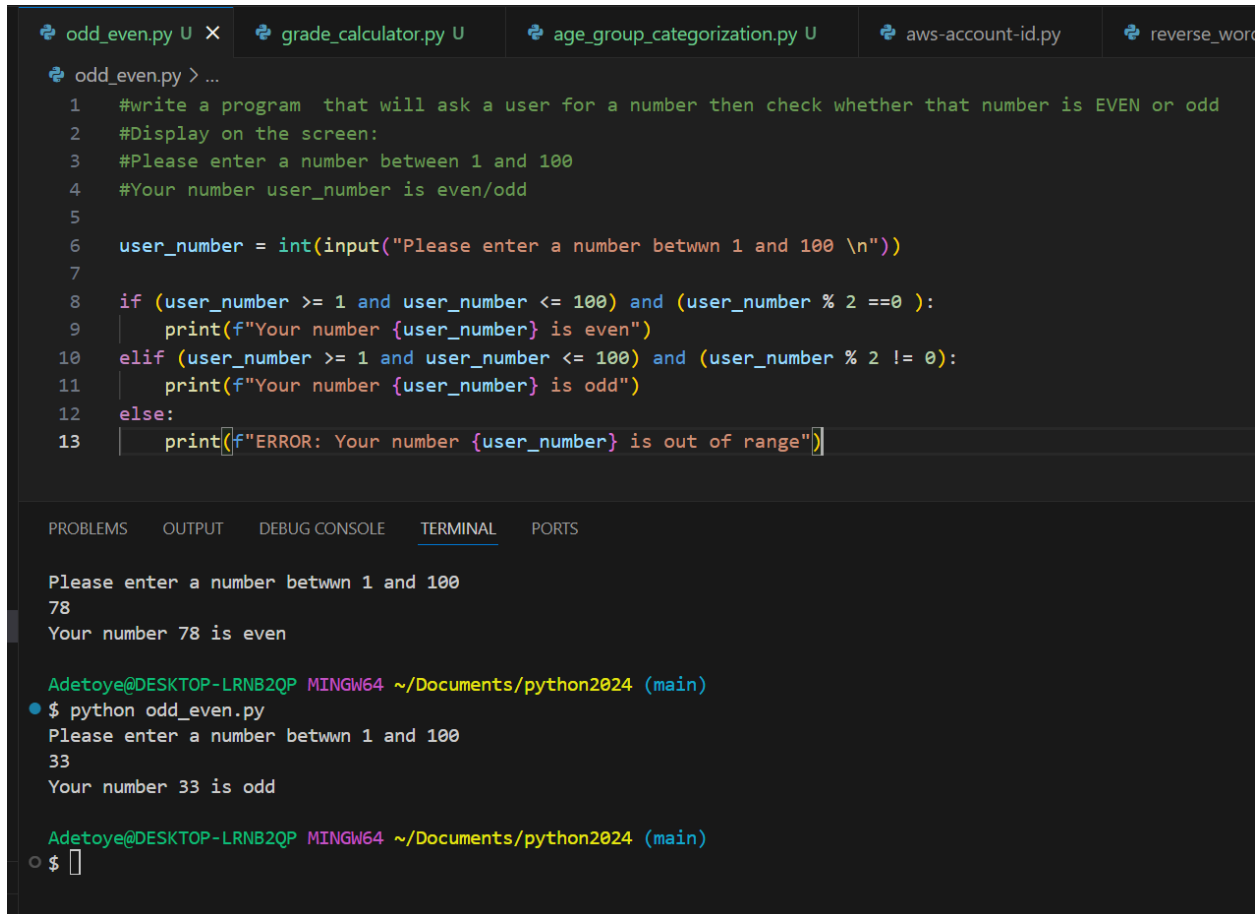
#write a program that will ask a user for a number then check whether that number is EVEN or odd

#Display on the screen:

#Please enter a number between 1 and 100

#Your number user_number is even/odd

Odd-even.py



The screenshot shows a code editor with several tabs: 'odd_even.py U', 'grade_calculator.py U', 'age_group_categorization.py U', 'aws-account-id.py', and 'reverse_word.py'. The 'odd_even.py' tab is active, displaying the following Python code:

```
1 #write a program that will ask a user for a number then check whether that number is EVEN or odd
2 #Display on the screen:
3 #Please enter a number between 1 and 100
4 #Your number user_number is even/odd
5
6 user_number = int(input("Please enter a number betwn 1 and 100 \n"))
7
8 if (user_number >= 1 and user_number <= 100) and (user_number % 2 == 0 ):
9     print(f"Your number {user_number} is even")
10 elif (user_number >= 1 and user_number <= 100) and (user_number % 2 != 0):
11     print(f"Your number {user_number} is odd")
12 else:
13     print(f"ERROR: Your number {user_number} is out of range")
```

Below the code editor is a terminal window with tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL', and 'PORTS'. The 'TERMINAL' tab is active, showing the execution of the script:

```
Please enter a number betwn 1 and 100
78
Your number 78 is even

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
$ python odd_even.py
Please enter a number betwn 1 and 100
33
Your number 33 is odd

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
$
```

Grade calculator script

#write a program that will ask a student for grade in 5 subjects

#calculate the average grade and print grade A-E

```
grade_calculator.py > ...
1 #write a program that will ask a student for grade in 5 subjects
2 #calculate the average grade and print grade A-E
3
4 grade1 = float(input("What's your grade in the 1st Subject: "))
5 grade2 = float(input("What's your grade in the 2nd Subject: "))
6 grade3 = float(input("What's your grade in the 3rd Subject: "))
7 grade4 = float(input("What's your grade in the 4th Subject: "))
8 grade5 = float(input("What's your grade in the 5th Subject: "))
9
10 average = (grade1 + grade2 + grade3 + grade4 + grade5) / 5
11
12 if average > 90:
13     print("A")
14 elif average > 80 and average < 90:
15     print("B")

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
● $ python grade_calculator.py
What's your grade in the 1st Subject: 45
What's your grade in the 2nd Subject: 98
What's your grade in the 3rd Subject: 87.8
What's your grade in the 4th Subject: 99.5
What's your grade in the 5th Subject: 34.9
C

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
○ $
```

Age_group categorization output

Prompt the user to enter their age as an integer

#Based on the input, categorize the person into one of the following

Infant (0-1), Toddler (2-3), child (4-12), Teenager (13-19), Adult (20-64), Senior (65 or older)

age_group_categorization.py > ...

```
4
5  age = int(input("what is your age today: "))
6
7  if age >= 0 and age <= 1:
8      print("You are an Infant")
9  elif age >= 2 and age <= 3 :
10     print("You are a Toddler")
11  elif age >= 4 and age <= 12 :
12     print("You are a Child")
13  elif age >= 13 and age <= 19 :
14     print("You are a Teenager")
15  elif age >= 20 and age <= 64 :
16     print("You are a Adult")
17  elif age >= 65 and age <= 150:
18     print("You are a Senior")
19  else:
20     print("ERROR: The age is invalid")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
$ python age_group_categorization.py
what is your age today: 3
● You are a Toddler

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
$ python age_group_categorization.py
what is your age today: 10
You are a Child

Adetoye@DESKTOP-LRNB2QP MINGW64 ~/Documents/python2024 (main)
○ $
```