

Programming I – Lab #5

Aim: Getting Familiar with the ELIF Clause in IF-ELIF-ELSE Statement

Topics:

1. ELIF Clause
2. IF-ELIF-Else Statement

Lab Questions –

Q1 – Write a program that **asks user to enter a country name**, if the country name is among the names in the following table, prints out its capital city, otherwise prints “Sorry! The entered country name is not in the list.”.

Country	Capital
Netherlands	Amsterdam
France	Paris
UK	London
Germany	Berlin

(You can write the code in any of the following two ways. Both are correct.)

```
country = input("Enter a country name: ")

if (country == 'Netherlands'):
    print("The capital of Netherlands is Amsterdam.")
elif (country == 'France'):
    print("The capital of France is Paris.")
elif (country == 'UK'):
    print("The capital of UK is London.")
elif (country == 'Germany'):
    print("The capital of Germany is Berlin.")
else:
    print("Sorry! The entered country name is not in the list.")
```

```

country = input("Enter a country name: ")

if (country == 'Netherlands'):
    capital = 'Amsterdam'
elif (country == 'France'):
    capital = 'Paris'
elif (country == 'UK'):
    capital = 'London'
elif (country == 'Germany'):
    capital = 'Berlin'
else:
    capital = 'Unknown'
    print("Sorry! The entered country name is not in the list.")

print("The capital of" , country , "is" , capital)

```

Q2 – Write a program that asks the user to **enter three float numbers**, and outputs the smallest number.

(You can write the code in any of the following two ways. Both are correct.)

```

a = float(input('Enter a float number: '))
b = float(input('Enter a float number: '))
c = float(input('Enter a float number: '))

if (a <= b) and (a <= c):
    small = a
elif (b <= a) and (b <= c):
    small = b
else:
    small = c

print("The smallest number is" , small)

```

```

a = float(input('Enter a float number: '))
b = float(input('Enter a float number: '))
c = float(input('Enter a float number: '))

if (a <= b) and (a <= c):
    print("The smallest number is" , a)
elif (b <= a) and (b <= c):
    print("The smallest number is" , b)
else:
    print("The smallest number is" , c)

```

Q3 – Write a program that asks the user to **enter three integer numbers**, and outputs the largest number.

```

a = int(input('Enter an integer number: '))
b = int(input('Enter an integer number: '))
c = int(input('Enter an integer number: '))

if (a >= b) and (a >= c):
    print("The largest number is" , a)
elif (b >= a) and (b >= c):
    print("The largest number is" , b)
else:
    print("The largest number is" , c)

```

Q4 – Write a program that will **let user to enter his/her mark (integer)**, and prints out its equivalent grade in letter, which are assigned based on the following schema.

Letter	Grade Equivalent Out of 100
AA	90-100
BA	85-89
BB	80-84
CB	75-79
CC	70-74
DC	60-69
DD	50-59
FD	40-49
FF	0-39

(You can write the code in any of the following two ways. Both are correct.)

```
mark = int(input("Enter your mark: "))

if (90 <= mark <= 100):
    print("Your grade in letter is AA.")
elif (85 <= mark <=89):
    print("Your grade in letter is BA.")
elif (80 <= mark <=84):
    print("Your grade in letter is BB.")
elif (75 <= mark <=79):
    print("Your grade in letter is CB.")
elif (70 <= mark <=74):
    print("Your grade in letter is CC.")
elif (60 <= mark <=69):
    print("Your grade in letter is DC.")
elif (50 <= mark <=59):
    print("Your grade in letter is DD.")
elif (40 <= mark <=49):
    print("Your grade in letter is FD.")
else:
    print("Your grade in letter is FF.")
```

```
mark = int(input("Enter your mark: "))

if (90 <= mark <= 100):
    print("Your grade in letter is AA.")
elif (mark >= 85):
    print("Your grade in letter is BA.")
elif (mark >= 80):
    print("Your grade in letter is BB.")
elif (mark >= 75):
    print("Your grade in letter is CB.")
elif (mark >= 70):
    print("Your grade in letter is CC.")
elif (mark >= 60):
    print("Your grade in letter is DC.")
elif (mark >= 50):
    print("Your grade in letter is DD.")
elif (mark >= 40):
    print("Your grade in letter is FD.")
else:
    print("Your grade in letter is FF.")
```