HW_2

November 1, 2020

[5]:
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#Homework 2
#Exercise 1
var = int(input ("give a number "))
sum = 0
for  number in range (1, var+1, 2):
      sum = sum  + number
      #print(number)
print("Sum of the Odd number is :", sum)
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give a number 21
Sum of the Odd number is : 121
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[7]:
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#Exercise 2
var_fibu = int(input ("give a number "))
x, y = 0, 1
while x <= var_fibu:
        print(x)
        z, x = x, y
        y = z + y
```

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give a number 2
0
1
1
2
```

[8]:
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#Exercise 3
from statistics import mean
june_salary = [5000, 4000, 7000, 800, 1000, 6000, 75000]
average = mean(june_salary)
print("The average is Salary is: ", round(average, 2))
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The average is Salary is:  14114.29
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[9]:
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#Exercise 4
disease_fresh_air = ["headache", "fever", "running nose"]
disease_bath = ["tiredness", "sleeplessness"]
user_input = ""
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user_name = input ("Please enter your name ")
goodbye_msg = "Hello " + user_name + ", thank you for visit us!"

while True :
     user_input = input ("Hey " + user_name + " Could you please type your␣
 ↪disease or type Exit to close! ")
     if user_input in disease_fresh_air:
           print ("Go outside and take some fresh air!")
     elif user_input in disease_bath:
           print ("Take a long bath and sleep!")
     elif user_input == "Exit":
           print (goodbye_msg)
           break
     else:
           print ("Unknown disease, please consult with specialist!")
```

```
Please enter your name Asif
Hey Asif Could you please type your disease or type Exit to close! Exit
Hello Asif, thank you for visit us!
```

[10]:
```
from statistics import mean
cities = [["Munich", 10,11, 16, 9, 22, -3, 23, 24, 17, 21],
          ["Dhaka",40, 37, 42, 41, 33, 23, 25, -1, 19, 14],
          ["Berlin",-3, 23, 27, 18, 21, 3, 23, 7, 17, 21],
          ["London", 23, 25, -10, 19, 14, 10,11, 16, 9, 22],
          ["Sydney",24, 28, 31, 33, 10, 9, 26, 36, 25, 29]]

cities_dict =    {x[0]:x[1:] for x in cities}
City_temp = ""
user_input = ""

while user_input != "Exit":
 user_input = input ("Please enter your city you want to visit or type Exit to␣
 ↪close!")

 if user_input in cities_dict:
    City_temp = cities_dict.get(user_input)
    avg = int(mean(City_temp))

    if avg > 39 or avg < 16:
        print("The weather is Bad. Pls enter again!")

    else:
        msg2 = City_temp[:5]
        msg3 = "It's good weather in "+ user_input + ". You should visit the␣
 ↪city. 10 days avg tmp " + str (avg) + " and Last 5 days Temp :"
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        print(msg3, msg2)
```

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Please enter your city you want to visit or type Exit to close!Exit
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[ ]:
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#Exercise 6
functions = ["Addition", "Subtraction", "Multiplication", "Division", "Exit"]
msg = "Welcome to my digital calculator. List of supported functions: "
print (msg, functions)
func_type = ""
goodbye_msg = "Thank you for using my digital Calculator!"

while True:

    func_type = input ("Which function do you want to execute : or type Exit to␣
 ↪close ")

    if func_type == "Exit":
        print (goodbye_msg)
        break

    else:
        value1 = float (input ("put the first value "))
        value2 = float (input ("put the second value "))

        if func_type == "Addition":
         print ("Result of the execution is: " + str (value1 + value2))

        elif func_type == "Subtraction":
         print ("Result of the execution is: " + str(value1 - value2))

        elif func_type == "Multiplication":
         print ("Result of the execution is: " + str (round ((value1 * value2),␣
 ↪2)))

        elif func_type == "Division":
         print ("Result of the execution is: " + str (round ((value1 / value2),␣
 ↪2)))

        else :
         print ("Unknown Functions!")
```

```
Welcome to my digital calculator. List of supported functions:  ['Addition',
'Subtraction', 'Multiplication', 'Division', 'Exit']
Which function do you want to execute : or type Exit to close Addition
put the first value 3.5
put the second value 2.6
Result of the execution is: 6.1
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Which function do you want to execute : or type Exit to close Division
put the first value 36
put the second value 7
Result of the execution is: 5.14
```

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