15112020_exam_1

November 15, 2020

[56]:
```
#Augabe 1
input_year = int(input("Please enter a year : "))
year = int(input_year)
#validation check
if 1 > year or year > 50000:
   print("please enter a valid number!")
#looking for the leap year
elif year % 4 == 0 and year % 100 != 0 or year % 400 == 0:
     print("Your year is a leap year!")
else :
     print("Your year is not a leap year!")
```

```
Please enter a year : -5
please enter a valid number!
```

[88]:
```
#Augabe 2
input_number = int(input("Please enter a number in between 1 and 50000 : "))
i = 0
while i < input_number:
    #validation check
    if 1 <= input_number and  input_number <= 5000:
     # multiplying the current value
      print (i*i)
      i+=1
    else:
        print("please enter a valid number!")
        break
```

```
Please enter a number in between 1 and 50000 : 50001
please enter a valid number!
```

[103]:
```
#Augabe 3
input_number = int(input("Please enter a number in between 1 and 50000 : "))
i = 0
#saving the * symbol to a variable
var_x =  ("*")
while i < input_number :
        i+=1
```

```
        print (var_x)
        #adding the * symbol to the current output
        var_x = var_x + "*"
```

```
Please enter a number in between 1 and 50000 : 5
*
**
***
****
*****
```

[102]:
```
#Aufgabe 4
#saving dictionary value into a variable
var_dict = {'Passed':'You have practiced at home.', 'Failed': 'You was not␣
 ↪serious.','Other': 'Write your own meaning.'}
user_input = input("Please enter a word : ")
if user_input in var_dict:
    #looking user input in the dictionary and saving to a vaiable
    msg = var_dict.get(user_input)
    print(msg)
else:
    print("Your input is not in the Dictionary available!")
```

```
Please enter a word : Failed
You was not serious.
```

[104]:
```
#Aufgabe 5
from statistics import mean
input_number = int(input("Please enter a number : "))
n = input_number
list1 = [10, 25, 3, 11, 88]
#using mean function for average
avg = mean(list1[0:n])
print ( avg )
```

```
Please enter a number : 5
27.4
```

[114]:
```
#Aufgabe 6
from statistics import mean
#declare a dictionary
input = {'Hasan': [10, 5, 20],
         'Sakir': [10, 10, 14],
         'Hanif': [20, 15, 10],
         'Saiful':[20, 20, 20]
        }
```

```
for key in input:
    #using round function for 2 digit and mean function for average
    print ("Average of " + key, ":", round(mean(input[key]), 2))
```

```
Average of Hasan : 11.67
Average of Sakir : 11.33
Average of Hanif : 15
Average of Saiful : 20
```

[ ]: