

1. Write a python program for the following:

– Input the string “Python” as a list of characters from console, delete at least 2 characters, reverse the resultant string and print it.

Sample input: python

Sample output: ntyp

```
In [20]: input_str = input("Please enter the input string : ")
org_len = len(input_str)

if input_str == "" : #check for empty string
    raise Exception("Input string cannot be empty.Please try again !!!")

delete_char = input("Please enter at least 2 characters from input string to be deleted : ")

for d in delete_char:
    input_str = input_str.replace(d,"") #deletes the characters

if org_len-2 >= len(input_str): # checks if atleast 2 characters are deleted
    print("Reversed string after deletion is :",input_str[::-1]) #reverses the string
else:
    raise Exception("Please delete at least 2 characters from the input string and try again !!!")
```

Please enter the input string : python
Please enter at least 2 characters from input string to be deleted : ho
Reversed string after deletion is : ntyp

```
In [21]: try:
    #accepts only numbers
    num_1 = float(input("Please enter the num1 : "))
    num_2 = float(input("Please enter the num2 : "))

    # Arithmetic operations
    print(f"Addition of {num_1} and {num_2} is : ", num_1+num_2)
    print(f"Subtraction of {num_1} and {num_2} is : ", num_1-num_2)
    print(f"Multiplication of {num_1} and {num_2} is : ", num_1*num_2)
    if num_2 != 0:
        print(f"Division of {num_1} by {num_2} is : ", num_1/num_2)
    else :
        print("Cannot divide by zero")
except:
    print("Only numbers are allowed.Please try again")
```

Please enter the num1 : 1
Please enter the num2 : 2
Addition of 1.0 and 2.0 is : 3.0
Subtraction of 1.0 and 2.0 is : -1.0
Multiplication of 1.0 and 2.0 is : 2.0
Division of 1.0 by 2.0 is : 0.5

2. Write a program that accepts a sentence and replace each occurrence of 'python' with 'pythons'.

```
In [4]: input_str = input("Please enter the input string : ")

if input_str == "" : #check for empty string
    raise Exception("Input string cannot be empty.Please try again !!!")

output = input_str.replace("python","pythons")
print(output)
```

Please enter the input string : I love playing with python
I love playing with pythons

3. Use the if statement conditions to write a program to print the letter grade based on an input class score. Use the grading scheme we are using in this class.

```
In [16]: try:
    #accepts only integers
    score = float(input("Please enter the score : "))
    percent = (score/500)*100

    #Conditions for grading the score obtained.
    if percent >= 90:
        print(f"Grade for score {percent}% is A")
    elif percent >= 80:
        print(f"Grade for score {percent}% is B")
    elif percent >= 70:
        print(f"Grade for score {percent}% is C")
    elif percent >= 60:
        print(f"Grade for score {percent}% is D")
    else:
        print(f"Grade for score {percent}% is F")
except:
    print("Only numbers are allowed.Please try again")
```

Please enter the score : 446
Grade for score 89.2% is B