

FileEditViewRunKernelTabsSettingsHelp

Exam.ipynbPython 3

Set 2

Name:Prajeet Guha

Stream: CSE
Year: 2nd Year
Sem: 3rd

Roll: 28

Write a Python program to reverse words in a sentence.

[2]:

```
while 1:

    try:

        sentence = input('Enter the sentence:')
        words = sentence.split()[::-1]
        res = ' '.join(words)
        print(res)
        break

    except:
        print('Try again.')
```

Enter the sentence: Hi This is Prajeet from CSE 2nd Year
Year 2nd CSE from Prajeet is This Hi

Write a Python program to transpose a matrix.

[8]:

```
while 1:

    try:

        sen = input('Enter matrix:(element separated by space new row separated by ,)').split(',')
        print('Untransposed matrix:')
        for row in sen:
            print(row)
        res = []

        for _ in range(len(sen[0].split(','))):
            res.append([])

        for row in sen:
            e = row.split()
            for i in range(len(e)):
                res[i].append(e[i])

        result = []
        for row in res:
            result.append(' '.join(row))

        print('\nThe transposed matrix:')
        for row in result:
            print(row)
        break

    except:
        print('Try again')
```

Enter matrix:(element separated by space new row separated by ,) 6 5 4 2,1 2 3 4,5 7 8 9
Untransposed matrix:
6 5 4 2
1 2 3 4
5 7 8 9

The transposed matrix:
6 1 5
5 2 7
4 3 8
2 4 9

Write a Python program using function which accepts n as input and returns the average from 1 to n, calculates median and mode.

[4]:

```
while 1:

    try:

        n = list(map(int,input('Enter n numbers separated by space:').split()))
        mean = sum(n)/len(n)
        n.sort()
        if len(n)%2 == 0:
            median = (n[int(len(n)/2)] + n[int((len(n)/2) + 1)])/2
        else:
            median = n[(int(len(n)+1)/2)]

        max = 0
        mode = []
        for i in set(n):
            if n.count(i) > max:
                max = n.count(i)
```

```
        mode = str(i)
    elif n.count(i) == max:
        mode += ' '+str(i)
    else:
        pass

    print(f'Mean:{mean}\nMedian:{median}\nMode:{mode}')
    break

except:
    print('Try again.')
```

Enter n numbers separated by space: 3 5 6 6 1 4 9 10 15 46 23 11
Mean:11.583333333333334
Median:9.5
Mode:6