Input/Output-Formatting

Ex. No: 1.1 **Date: 12.03.24**

Register No.: 231901018 **Name: Kavin Sainath S**

Converting Input Strings

Writeaprogramtoconvertstringstoanintegerandfloatanddisplayitstype.

Sample Input:

10

10.9

Sample Output:

10,<class'int'>

10.9,<class'float'>

For example:

Input	Result
10 10.9	10,<class'int'> 10.9,<class'float'>

Program:

```
a=int(input())
print(a,end=",")
print(type(a))
b=float(input())
print(round(b,1),end=",")
print(type(b)
```

	Input	Expected	Got	
✔	10 10.9	10,<class 'int'> 10.9,<class 'float'>	10,<class 'int'> 10.9,<class 'float'>	✔
✔	12 12.5	12,<class 'int'> 12.5,<class 'float'>	12,<class 'int'> 12.5,<class 'float'>	✔
✔	89 7.56	89,<class 'int'> 7.6,<class 'float'>	89,<class 'int'> 7.6,<class 'float'>	✔
✔	55000 56.2	55000,<class 'int'> 56.2,<class 'float'>	55000,<class 'int'> 56.2,<class 'float'>	✔
✔	2541 2541.679	2541,<class 'int'> 2541.7,<class 'float'>	2541,<class 'int'> 2541.7,<class 'float'>	✔

Ex. No: 1.2 **Date: 12.03.24**

Register No.: 231901018 **Name: Kavin Sainath S**

Gross Salary

Ramesh'sbasicsalaryisinputthroughthekeyboard.Hisdearnessallowanceis40%ofhisbasic salary,andhishouserentallowanceis20%ofhisbasicsalary.Writeaprogramtocalculatehis grosssalary.

Sample Input:

10000

Sample Output:

16000

For example:

Input	Result
10000	16000

Program:

```
a=int(input())

b=a*0.6

print(round(a+b))
```

	Input	Expected	Got	
✔	10000	16000	16000	✔
✔	20000	32000	32000	✔
✔	28000	44800	44800	✔
✔	5000	8000	8000	✔

Ex. No. :1.3 **Date: 12.03.24**

Register No.: 231901018 **Name: Kavin Sainath S**

Square Root

Writeasimplepythonprogramtofindthesquarerootofagivenfloatingpointnumber.The outputshouldbedisplayedwith3decimalplaces.

SampleInput:

8.00

SampleOutput:

2.828

For example:

Input	Result
14.00	3.742

Program:

```
import math

a=float(input())

b=math.sqrt(a)

print(format(b,".3f"))
```

	Input	Expected	Got	
✔	8.00	2.828	2.828	✔
✔	14.00	3.742	3.742	✔
✔	4.00	2.000	2.000	✔
✔	487	22.068	22.068	✔

Ex. No. : 1.4 **Date: 12.03.24**

Register No.: 231901018 **Name: Kavin Sainath S**

Gain percent

AlfredbuysanoldscooterforRs.XandspendsRs.Yonitsrepairs.IfhesellsthescooterforRs.Z (Z>X+Y).WriteaprogramtohelpAlfredtofindhisgainpercent.Getalltheabove-mentioned valuesthroughthekeyboardandfindthegainpercent.

InputFormat:

ThefirstlinecontainstheRsX

ThesecondlinecontainsRsY

ThethirdlinecontainsRsZ

SampleInput:

10000

250

15000

SampleOutput:

46.34isthegainpercent.

For example:

Input	Result
45500 500 60000	30.43isthegainpercent.

Program:

```
a=int(input())
b=int(input())
c=int(input())
d=a+b
e=c-d
f=(e/d)*100
print(format(f,".2f"),"isthegainpercent.")
```

	Input	Expected	Got	
✔	10000 250 15000	46.34 is the gain percent.	46.34 is the gain percent.	✔
✔	45500 500 60000	30.43 is the gain percent.	30.43 is the gain percent.	✔
✔	5000 0 7000	40.00 is the gain percent.	40.00 is the gain percent.	✔
✔	12500 5000 18000	2.86 is the gain percent.	2.86 is the gain percent.	✔

Ex. No.: 1.5 **Date: 12.03.24**

Register No.: 231901018 **Name: Kavin Sainath S**

Deposits

Inmanyjurisdictions,asmalldepositisaddedtodrinkcontainerstoencouragepeople to recyclethem.Inoneparticularjurisdiction,drinkcontainersholdingoneliteror lesshavea $0.10depositanddrinkcontainersholdingmorethanoneliterhavea $0.25deposit.Writea programthatreadsthenumberofcontainersofeachsize(lessandmore) fromthe user. Yourprogramshouldcontinuebycomputinganddisplayingtherefundthatwill

be receivedforreturningthosecontainers.Formattheoutputsothatitincludesadollar sign andalwaysdisplaysexactlytwodecimalplaces.

SampleInput

10

20

SampleOutput

YourtotalrefundwillbeⓈ6.00.

For example:

Input	Result
20 20	YourtotalrefundwillbeⓈ7.00.

Program:

```
a=int(input())
b=int(input())
c=a*0.1+b*0.25
print("Your total refund will be $",format(c,".2f"),".",sep="")
```

	Input	Expected	Got	
✔	20 20	Your total refund will be $7.00.	Your total refund will be $7.00.	✔
✔	11 22	Your total refund will be $6.60.	Your total refund will be $6.60.	✔
✔	123 200	Your total refund will be $62.30.	Your total refund will be $62.30.	✔
✔	76 38	Your total refund will be $17.10.	Your total refund will be $17.10.	✔

Ex. No.: 1.6 **Date: 12.03.24**

Carpenter

Justinisacarpenterwhoworksonanhourlybasis.Heworksinacompanywhereheispaid Rs50 foranhouronweekdaysandRs80foranhouronweekends.Heworks10hrsmoreonweekdays thanweekends.Ifthesalarypaidforhimisgiven,writeaprogramtofindthenumberofhourshe hasworkedonweekdaysandweekends.

Hint:

Ifthefinalresult(hrs)arein-veconvertthatto+veusingabs()function

The abs() functionreturnstheabsolutevalueofthegivennumber.

```
number=-20
absolute_number=abs(number)
print(absolute_number)
#Output:20
```

Sample Input:

450

Sample Output:

weekdays10.38

weekend0.38

For example**:**

Input	Result
450	weekdays10.38 weekend0.38