

RAJALAKSHMI ENGINEERING COLLEGE

RAJALAKSHMI NAGAR, THANDALAM – 602 105



RAJALAKSHMI
ENGINEERING COLLEGE

CS23221
PYTHON PROGRAMMING LAB

Laboratory Observation Notebook

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01 - Introduction to Python-Variables-Datatypes

Input/Output-Formatting

Sample Output:

10,<class 'int'>

10.9,<class 'float'>

For example:

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

Ex. No. : 1.1

Date:

Register No.: 230701358

Name: TARUN C

Converting Input Strings

Write a program to convert strings to an integer and float and display its type.

Sample Input:

10

10.9

Program:

```
a=int(input())  
b=float(input())  
s=type(a)  
p=type(b)  
b=round(b,1)  
print(a,s,sep=',')  
print(b,p,sep=',')
```

Sample Input:

10000

Sample Output:

16000

For example:

Input	Result
10000	16000

Ex. No. : 1.2

Date:

Register No.: 230701358

Name: TARUN C

Gross Salary

Ramesh's basic salary is input through the keyboard. His dearness allowance is 40% of his basic salary, and his house rent allowance is 20% of his basic salary. Write a program to calculate his gross salary.

Program:

```
a=int(input())
```

```
s=(20/100)*a
```

```
p=(40/100)*a
```

```
c=int(s+p)+a
```

```
print(c)
```

Sample Input:

8.00

Sample Output:

2.828

For example:

Input	Result
14.00	3.742

Ex. No. : 1.3

Date:

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Square Root

Write a simple python program to find the square root of a given floating point number. The output should be displayed with 3 decimal places.

Program:

```
k=float(input())
```

```
m=(k**.5)
```

```
print("%.3f"%m)
```

Input Format:

The first line contains the Rs X

The second line contains Rs Y

The third line contains Rs Z

Sample Input:

10000

250

15000

Sample Output:

46.34 is the gain percent.

For example:

Input	Result
45500 500 60000	30.43 is the gain percent.

Ex. No. : 1.4

Date:

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Gain percent

Alfred buys an old scooter for Rs. X and spends Rs. Y on its repairs. If he sells the scooter for Rs. Z ($Z > X + Y$). Write a program to help Alfred to find his gain percent. Get all the above-mentioned values through the keyboard and find the gain percent.

Program:

```
x=int(input())
y=int(input())
z=int(input())
a=x+y
c=z-a
pinky=(c/a)*100
print("%.2f"%pinky , "is the gain percent.")
```