Practice Set-1

Ques-1. Write a program for the addition of Two Numbers.

Code:

```
num1 = int(input("Enter 1st number"))
num2 = int(input("Enter 2nd number"))
sum = num1 + num2

print("Addition = ", sum)
```

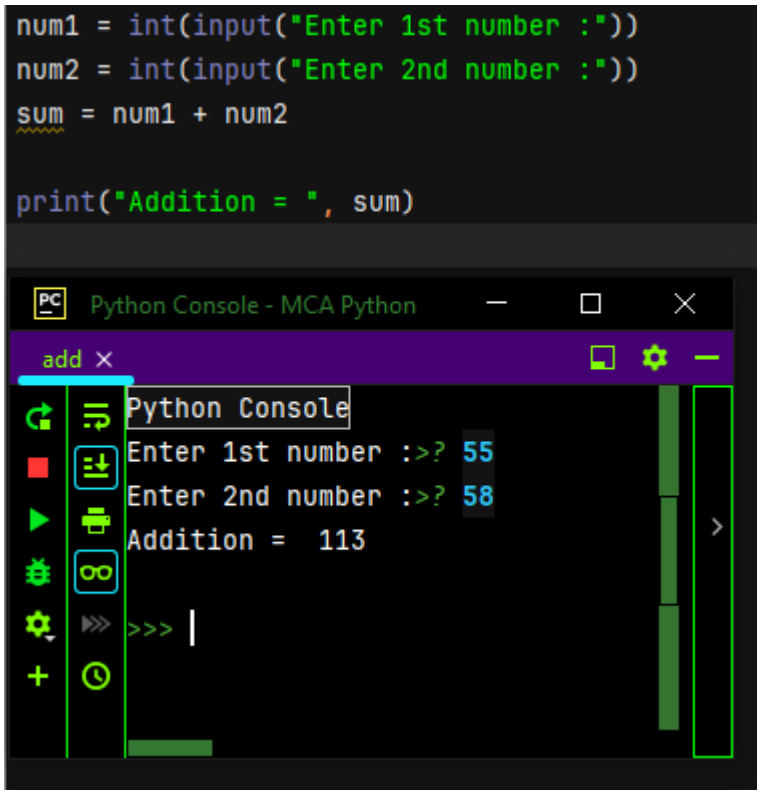
Output:

Enter 1st number: 55

Enter 2nd number: 58

Addition = 113

Snapshot:



Ques-2. Write a program to read two numbers and print their quotient and remainder.

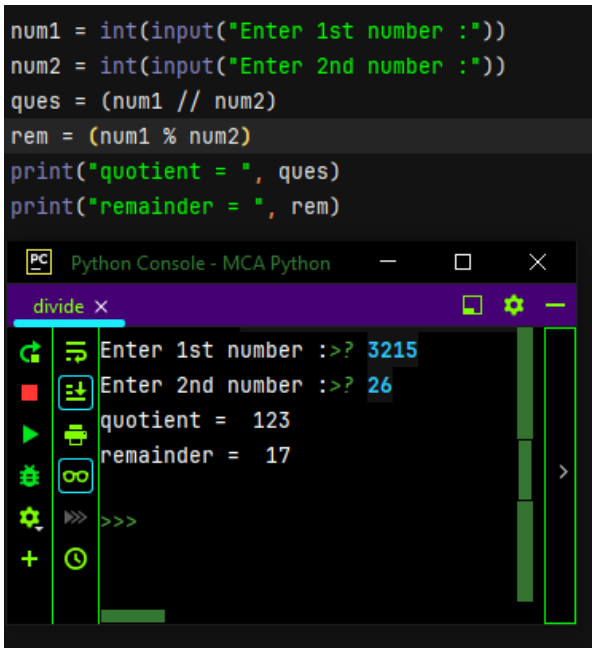
Code:

```
num1 = int(input("Enter 1st number"))
num2 = int(input("Enter 2nd number"))
ques = (num1 // num2)
rem = (num1 % num2)
print("quotient = ", ques)
print("remainder = ", rem)
```

Output:

```
Enter 1st number>? 3215
Enter 2nd number>? 26
quotient = 123
remainder = 17
```

Snapshot:



Ques-3. Write a program to find the Average of Three Numbers.

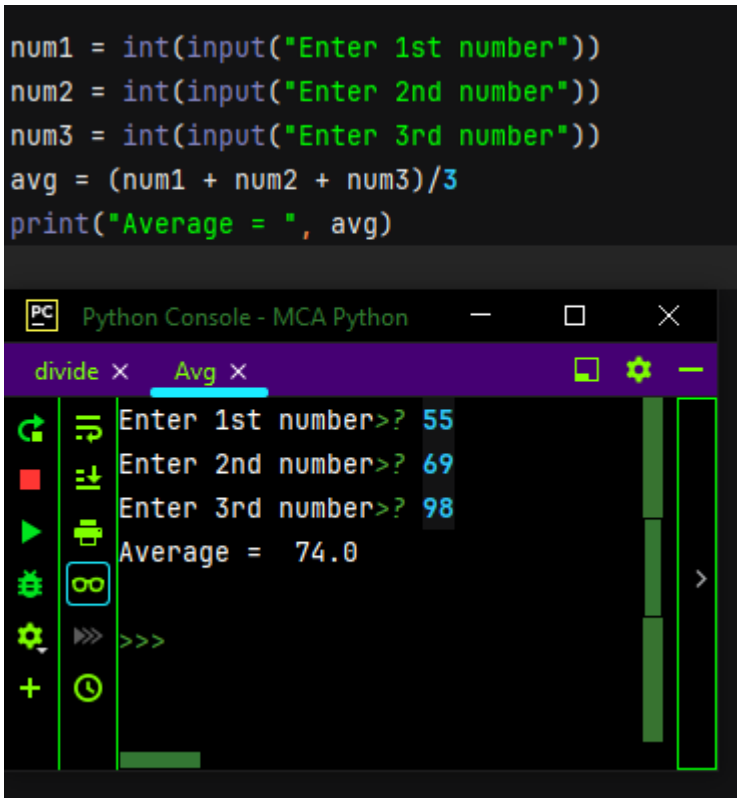
Code:

```
num1 = int(input("Enter 1st number"))
num2 = int(input("Enter 2nd number"))
num3 = int(input("Enter 3rd number"))
avg = (num1 + num2 + num3)/3
print(avg)
```

Output:

```
Enter 1st number>? 55
Enter 2nd number>? 69
Enter 3rd number>? 98
Average = 74.0
```

Snapshot:



Ques-4. Write a program to Calculate Sum of 5 Subjects and Find Percentage (Max Mark in each subject is 100).

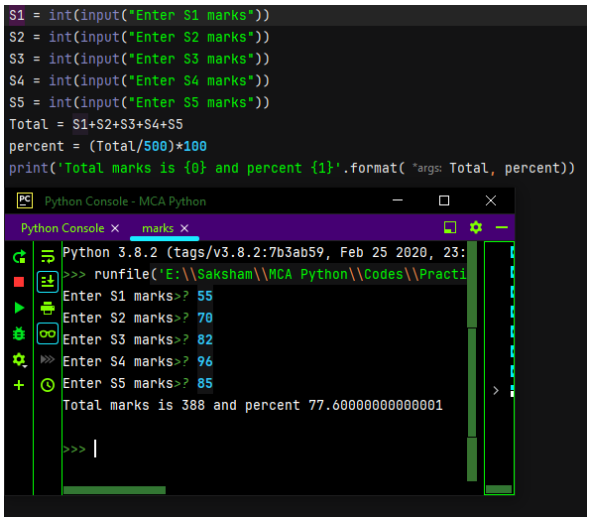
Code:

```
S1 = int(input("Enter S1 marks"))
S2 = int(input("Enter S2 marks"))
S3 = int(input("Enter S3 marks"))
S4 = int(input("Enter S4 marks"))
S5 = int(input("Enter S5 marks"))
Total = S1+S2+S3+S4+S5
percent = (Total/500)*100
print('Total marks is {0} and percent {1}'.format(Total, percent))
```

Output:

```
Enter S1 marks>? 55
Enter S2 marks>? 70
Enter S3 marks>? 82
Enter S4 marks>? 96
Enter S5 marks>? 85
Total marks is 388 and percent 77.60000000000001
```

Snapshot:



Ques-5 Write a program to find gross salary.

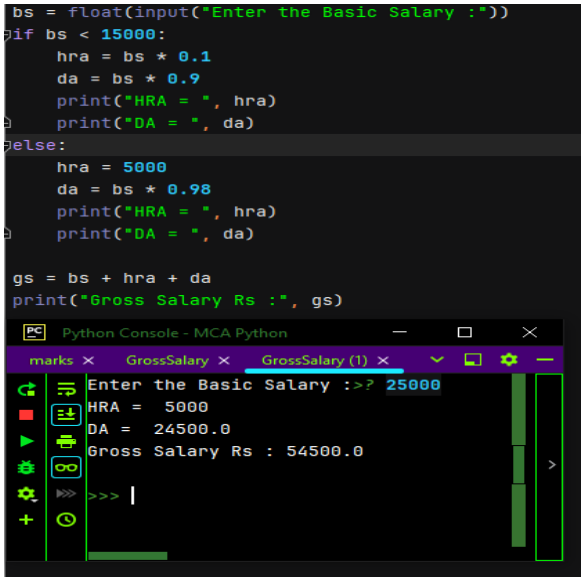
Code:

```
bs = float(input("Enter the Basic Salary :"))
if bs < 15000:
   hra = bs * 0.1
   da = bs * 0.9
   print("HRA = ", hra)
   print("DA = ", da)
else:
   hra = 5000
   da = bs * 0.98
   print("HRA = ", hra)
   print("DA = ", da)

gs = bs + hra + da
print("Gross Salary Rs :", gs)
```

Output:

```
Enter the Basic Salary :>? 25000
HRA = 5000
DA = 24500.0
Gross Salary Rs: 54500.0
```

Snapshot:



Ques-6 Write a program to Calculate Area of Circle.
Code:

```
PI = 3.14
R = float(input("Enter radius of a circle :"))
area = PI*R*R
print("Area of circle = ", area)
```

Output:
Enter radius of a circle :>? 5
Area of circle = 78.5

Snapshot:

```
PI = 3.14
R = float(input("Enter radius of a circle :"))
area = PI*R*R
print("Area of circle = ", area)
```

```
Python Console - MCA Python
AreaOfCircle
Enter radius of a circle :>? 5
Area of circle =  78.5
>>>
```

Ques-7 Write a program to Calculate Area of Rectangle.

Code

```
# Area of rectangle

l = 40
b = 30
area = l * b
print(area)
```

Output:

area = 1200

Snapshot:

```
1   # Area of rectangle
2
3   l = 40
4   b = 30
5   area = l * b
6   print("area = ", area)
7
```

```
Run - MCA Python
Run   rectangleArea
"C:\Program Files\Python312\python
 .exe" "E:\Saksham\MCA
 Python\Codes\Practice set
 1\rectangleArea.py"
area =  1200

Process finished with exit code 0
```

Ques-8 Write a program to Calculate Area of Square

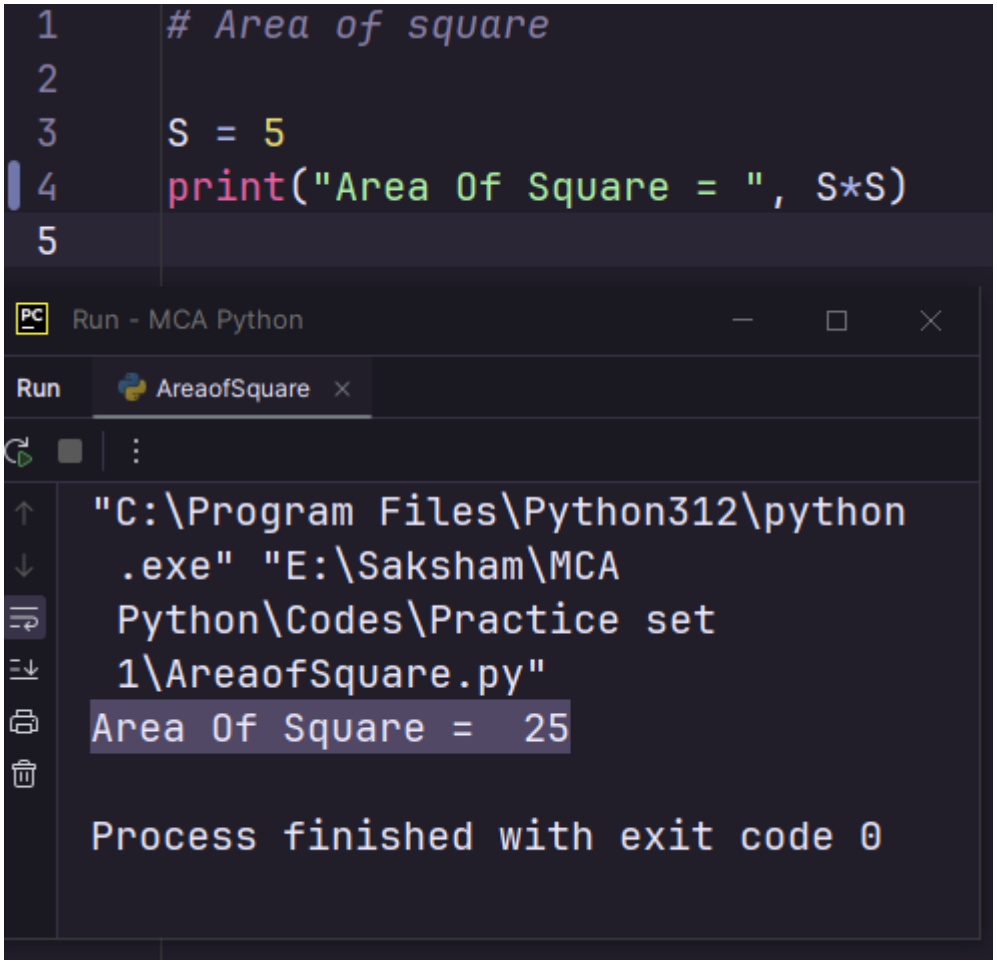
Code:

```
# Area of square

S = 5
print("Area Of Square = ", S*S)
```

Output:

Area Of Square = 25

Snapshot:



Ques-9 Write a program to swap the values of two variables

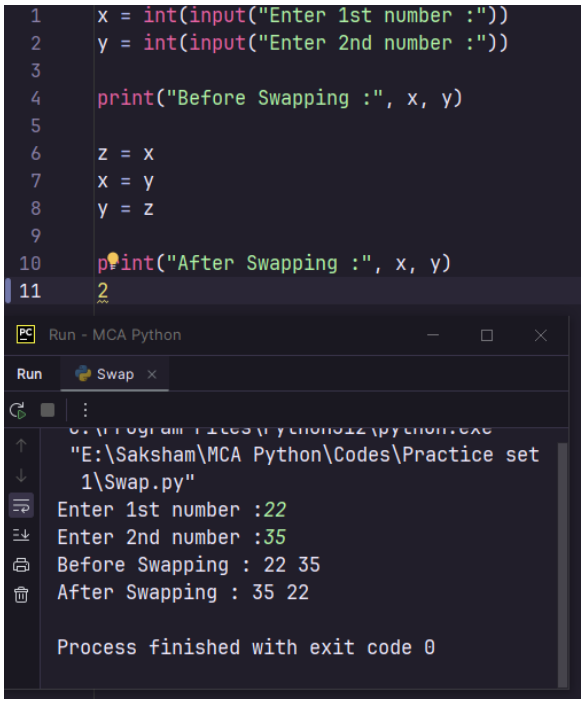
Code:

```
x = int(input("Enter 1st number :"))
y = int(input("Enter 2nd number :"))

print("Before Swapping :", x, y)

z = x
x = y
y = z

print("After Swapping :", x, y)
```

Output:

```
Enter 1st number :22
Enter 2nd number :35
Before Swapping : 22 35
After Swapping : 35 22
```

Snap:



Ques-10 Write a program to swap the values of two variables without using third variable

Code:

```
# Swapping two variables without a third variable using arithmetic operations
# def swap_variables(a, b):
#     a = a + b
#     b = a - b
#     a = a - b
#     return a, b


# Example usage
x = int(input("Enter 1st number :"))
y = int(input("Enter 2nd number :"))

print("Before Swapping :")
print("x =", x)
print("y =", y)

x = x + y
y = x - y
x = x - y

# x, y = swap_variables(x, y)

print("After swapping:")
print("x =", x)
print("y =", y)
```

Output:

```
Enter 1st number :22
Enter 2nd number :36
```

Before Swapping :

x = 22

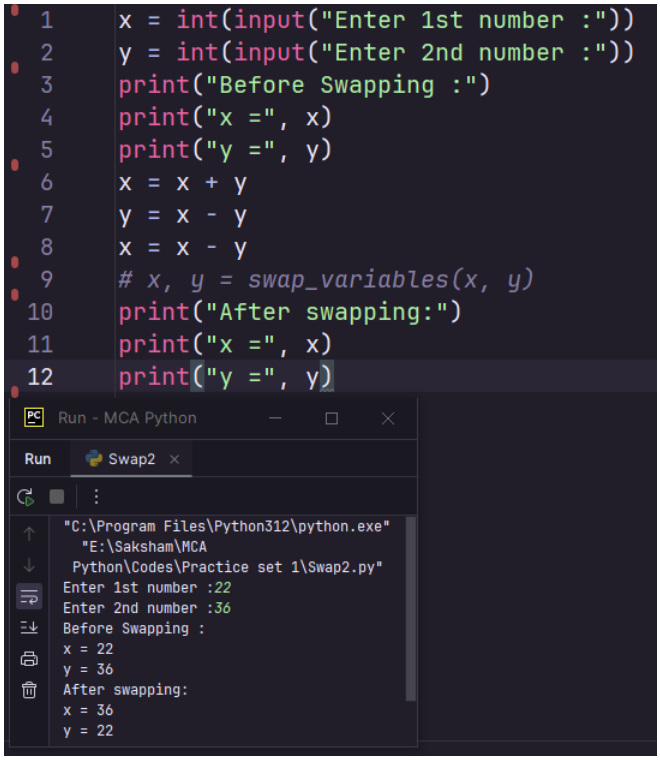
y = 36

After swapping:

x = 36

y = 22

Snap:



Ques-11 Write a program to Compute Simple Interest

Code:

```
p = float(input("Enter principal amount :"))
r = float(input("Enter rate of interest :"))
t = float(input("Enter time :"))

SI = (p*r*t)/100

print ("Simple Interest = ", SI)
```

Output:

```
Enter principal amount :15000
Enter rate of interest :10
Enter time :9
Simple Interest =  13500.0
```

Snap: