

### Question 1:

There are two numbers given below. Print the sum of these numbers if their product is greater than 100. Otherwise, print their product.

```
a = 15
```

```
b = 12
```

**Expected Output:**

```
27
```

### Question 2:

Write a Python program to print the volume of a cone whose height and diameter are given below.  
(Take pi = 3.14)

```
h = 10
```

```
d = 13
```

**Expected Output:**

```
442.21666666666664
```

### Question 3:

We have the name and seat numbers of a student given below as two tuples. With this given data, print the students' names and their assigned seat numbers in a single line using the appropriate data type.

```
name = ('Shaun', 'Ron', 'Michael')
```

```
seat_numbers = (101, 102, 103)
```

**Expected Output:**

```
{'Shaun': 101, 'Ron': 102, 'Michael': 103}
```

#### Question 4:

We have a number given below. If the number is greater than 0, add 1 to it. Otherwise, subtract 1 from it, and print the new number obtained.

num = -6

**Expected Output:**

-7

#### Question 5:

I have four variables, each assigned with certain values given below. A massive expression line follows it. Re-write the expression which suits the desired lexical model.

a = 5

b = 2

c = 8

d = 7

$x = (((a + b) * (a + c) * (a + d)) / ((b + a) * (b + c) * (b + d)) / ((c + a) * (c + b) * (c + d))) * (a * b * c * d)$

**Expected Output:**

0.4977777777777778

#### Question 6:

There are two numbers given below. Compare them and print the result obtained.

a = 5

b = 9

**Expected Output:**

b is greater than a

#### Question 7:

We have a set given below. Find out whether 10 and 7 are present in the given set or not.

mySet = {5, 7, 2, 6, 3}

**Expected Output:**

False

True

**Question 8:**

We have a number given below. Write a program to check for the divisibility of this number by 3 and 5, and print the result obtained.

a = 12

**Expected Output:**

a is divisible by either 3 or 5, but not both

**Question 9:**

Write a Python program to check if the given year is a leap year.

year = 1996

**Expected Output:**

Leap Year

**Question 10:**

I have an examination form that requires the following information.

Name, Age, Roll Number, and Subjects.

Declare the parameters mentioned above with a suitable data type, and then assign some values to it, and finally print the result.

**Expected Output:**

Name: Sachin

Age: 17

Roll Number: 528841

Subjects: ['Maths', 'Physics', 'Chemistry', 'Computer Science', 'English']