

Lec 1 – Variables, Data Types Questions

- Print Statement
- Variables & Input Statement
- Literals
- Primitive Data Types
 - Str (characters)
 - Numbers (int, float)
 - Booleans
- Derived Data Types
 - List
 - Tuple
 - Dictionary
 - Set
 - Class
 - Numbers (complex no)
- Operators
 - Assignment (=)
 - Arithmetic (+, -, *, /, %, **, :=)
 - Comparison (>, <, ==, !=, >=, <=)
 - Logical (and, or, not)
 - Identity (is, is not)
 - Membership (in, not in)
 - Bitwise – (&, |) ignore
- Strings Basics
 - Single Line String
 - Multi Line String
 - Storing Strings
 - Index in Strings
 - Loop through strings
- String Methods
 - str.endswith()
 - in, not in
 - if
- Loops
 - For Loop – using range
 - While Loop
 - For vs while when to use

Questions

1. Print the first 5 positive integers in ascending order with one number in each line.
2. Print the following pattern.

```
*  
**  
***  
****  
*****
```

There are no spaces between consecutive stars. There are no spaces at the end of each line.

3. Accept an integer as input and print its square as output.
4. Accept two integers as input and print their sum as output.
5. Accept two words as input and print the two words after adding a space between them.

Question Set 2

6. Accept the registration number of a vehicle as input and print its state-code as output. (TN-10-AB-2010) -> TN

7. Accept a five-digit number as input and print the sum of its digits as output. (1,2,3,4,5) -> 15

* 8. Print the following pattern. There is exactly one space between any two consecutive numbers on any line. There are no spaces at the end of any line.

```
1 2 1
1 2 3 2 1
1 2 3 4 3 2 1
1 2 3 4 5 4 3 2 1
```

* 9. A simple algorithm has to be designed to find out whether a student belongs to the Data Science (DS) branch or not. The input will be a student's roll number, which is of the form BR18B0000. True/ False as output

* 10. Determine if given no plate could belong to the criminal or not. Print **True** if the number plate contains TN07 and **False** otherwise. Assume no plate of format: AA00AA00.

Coming Soon!