Pbm - 1:
Store the list of all Indian states (or atleast 10 to 15 states). Sort them alphabetically.

Pbm - 2:
Using that sorted list from above, create a dictionary of capitals for all those states. This time, print the dictionary of states by alphabetical sorting of their capitals.

Pbm - 3:
Get your user name and password as input as a comma separated string
Validate if name and password is a string. Else, exit
If length of user name exceeds 10 chars, print message and exit
Or if length of password exceeds 8 chars, print message and exit
Validate if user name contains a mix of capital and lower case. If not,print message and exit
Validate if password contains atleast one alphabetic char, numeric char and one special symbol like @#$%!^&*.
If any one of validation fails, print message and exit
If all above validation passes, store your username and password (if they pass all the above validations) in a dictionary.

Pbm - 4:
Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).

Pbm - 5:
Write a Python program to guess any random number. If user enters a number between 1 to 100 and if that number is divisible by both 5 and 3, print
the message ' Your guess is right' . Else, print 'Your guess is wrong'. If user enters the message 'stop' instead of number, the program should exit

Pbm - 6:
Write a Python program to get the Fibonacci series between 0 to 50.
Note : The Fibonacci Sequence is the series of numbers :
0, 1, 1, 2, 3, 5, 8, 13, 21, ...
Every next number is found by adding up the two numbers before it.
Expected Output : 1 1 2 3 5 8 13 21 34

Pbm - 7:
Write a Python program to check whether an alphabet is a vowel or consonant.
Expected Output:
Note : a,e,i,o,u are vowels
Input a letter of the alphabet: k
k is a consonant.

Pbm - 8:
Write a Python program to convert month name to number of days.
Expected Output:
List of months: January, February, March, April, May, June, July, August
, September, October, November, December
Input the name of Month: February
No. of days: 28/29 days

Pbm - 9:
Write a Python program to create the multiplication table (from 1 to 10) of a number.

Expected Output:
Input a number: 6
6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60

Pbm -10:
Write a Python program which accepts a sequence of comma-separated
numbers from user and generate a list and a tuple with thosenumbers.
Sample data: 3,5,7,23
Output:
List:['3','5','7','23']
Tuple:('3','5','7','23

Pbm - 11:
Get a filename from user and print the extension of file
Sample : abcname.java
Output : the file entered is a .java file

Pbm - 12:
Write a Python script to check max of 2numbers.
Write a function to compute the max of 2 numbers.2 numbers should be entered as input from user.

Pbm - 13:
Get as many employee ids as input from user. Validate if any of employee ids entered is a duplicate. If it's a duplicate, print 'Invalid input. Try again' and get the input again. If user enters a message -1, then, stop the inputs.

Pbm - 14:
Get student name and score as input (seperated by a comma while typing in console). Restrict the number of students to 5. Create a mapping of name and score. Rank order the student details
based on their scores. Score with 100 is rank1 and score with 99 is rank2. There can be more than one student who can have same score - in this case, print the student names seperated by a comma.

Pbm - 15:
Experimental exercise : Convert a string to list,tuple,dictionary,set,number and vice-versa and see which one works and which one does not. This is for emphasizing the usage of type-casting functions.