

1. Write a Python program to find the second smallest number in a list.

```
In [1]: def second_smallest(numbers):
        if (len(numbers)<2):
            return
        if ((len(numbers)==2) and (numbers[0] == numbers[1])):
            return
        dup_items = set()
        uniq_items = []
        for x in numbers:
            if x not in dup_items:
                uniq_items.append(x)
                dup_items.add(x)
            uniq_items.sort()
        return uniq_items[1]

print(second_smallest([1, 2, -8, -2, 0]))
```

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2. Write a Python program to change a given string to a new string where the first and last chars have been exchanged

```
In [2]: def exchg_strchar(str):
        return str[-1] + str[1:-1] + str[0]

print(exchg_strchar("AIML-COURSE"))
```

EIML-COURSA

3. Write a Python function that takes a list of words and returns the length of the longest one

```
In [3]: def long_word(lst):
        wordlen = len(lst[0])
        lword = lst[0]

        for i in lst:
            if (len(i) > wordlen):
                wordlen = len(i)
                lword = i

        print("Longest word is:", lword)
        print("Length of longest word is:", wordlen)

lst = ["AIML", "JNTUH", "Hyderabad", "6Months"]
long_word(lst)
```

Longest word is: Hyderabad  
Length of longest word is: 9

4. Write a Python program to remove the nth index character from a nonempty string

```
In [4]: string=input("Enter non-empty string:")
        n=int(input("Enter the index of the character to remove:"))
        first = string[:n]
        last = string[n+1:]
        print("String after deleting n'th index:",first+last)
```

Enter non-empty string:AIML - COURSE  
Enter the index of the character to remove:3  
String after deleting n'th index: AIM - COURSE

#### 5. Check if a given key already exists in a dictionary

```
In [5]: d = {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}
def is_key_present(x):
    if x in d:
        print('Key is present in the dictionary')
    else:
        print('Key is not present in the dictionary')

is_key_present(5)
is_key_present(9)
```

Key is present in the dictionary  
Key is not present in the dictionary