

- 1) Given below is a Dictionary student\_details representing student details – student id is key and student name is a value.  
Student\_details = {1001: "Ram", 1004: "Shyam", 1005: "Kamal", 1003: "John"}  
Write Python code to perform below mentioned operations:
  - i) Print details of Students
  - ii) Print ids of Students
  - iii) Print Students name in ascending order
  - iv) Delete the details of student id = 1005 and print updated dictionary
  - v) Update the name of student id = 1003 to "Kishan" and print updated dictionary
  - vi) Check whether details of students with id 1002 exists in the dictionary.
- 2) Suppose the input is a string –  
"You have received first email from abc@gmail.com, You have received second email from def@gmail.com, You have received third email from pqr@gmail.com, You have received fourth email from qwert@gmail.com, You have received fifth email from spam@gmail.com"  
Now write a Python program for the following tasks:
  - i) Display the list of unique words in the above input using **set data structure**.
  - ii) Display the count of each unique word.
  - iii) A bigram is defined as a collection of two consecutive words, for example: You have, have received, ... Display the list of unique bigrams in the above text and their counts **using set data structure**. (HINT: You may use the split function and nested for loops to do the task)
- 3) Consider the same input as question – 2. Now write a Python program for the following tasks:
  - i) Display the word count using **dictionary data structure**.
  - ii) A bigram is defined as a collection of two consecutive words, for example: You have, have received, ... Display the list of unique bigrams in the above text and their counts using **dictionary data structure**. (HINT: You may use the split function and nested for loops to do the task)
- 4) Consider we have marks of 3 sections of a competitive exam paper of 10 students. Consider the input is as [(202021001, S-I, 65), (202021021, S-I,85), (202021001, S-II,75), (202021001, S-III, 85), (202021021, S-III,65), (202021001, S-III, 55) ...for 10 students]. Now use the **dictionary data structure** and store the marks of all three sections in-front of the respective student id number. Second, perform the addition of the marks secured in all sections for each student and find the student id whose overall total is the highest.