04-sets-exercise

May 8, 2024

1 Assignment Instructions

Hello Innominion,

- Try to attempt all the questions in every possible way.
- Some other topics are required to solve some questions. don't panic.
- Those questions can be answered after the topics are taught.
- Join Mentoring Session for the Support/Doubts Resolving with Our Technical Mentors (2.00 PM 6.00 PM Mon-Sat)

Happy Learning!!!

1.0.1 Sets

Question: Create a set "s" with elements

1, 2, 'innomatics', 'hub'

```
[4]: # CODE HERE
s={1,2,'innomatics','hub'}
print(s)
```

{1, 2, 'hub', 'innomatics'}

```
[5]: s
```

[5]: {1, 2, 'hub', 'innomatics'}

Question: Add element 'Technology' in s

```
[6]: # CODE HERE
s.add('Technology')
print(s)
```

{1, 2, 'Technology', 'innomatics', 'hub'}

```
[7]: s
```

[7]: {1, 2, 'Technology', 'hub', 'innomatics'}

Question: Create one more set "sc" with elements

```
3,4, 'hub', 'Technology'
 []: # CODE HERE
 [8]: sc = {3, 4, 'hub', 'Technology'}
      print(sc)
     {'hub', 3, 4, 'Technology'}
[10]: sc
[10]: {3, 4, 'Technology', 'hub'}
          Question: Find difference of two sets s and sc
     s - sc
 [ ]: # CODE HERE
[11]: difference = s - sc
      print(difference)
     {1, 2, 'innomatics'}
          Question: remove 2 from set s
[12]: s.remove(2)
      print(s)
     {1, 'Technology', 'innomatics', 'hub'}
 []: # CODE HERE
[13]: s
[13]: {1, 'Technology', 'hub', 'innomatics'}
          Question: Print common element in two sets s and sc
     s intersection sc
 [ ]: # CODE HERE
[14]: common_elements = s & sc
      print(common_elements)
     {'hub', 'Technology'}
          Question: Print all element in two sets
```

```
s union sc
```

```
[]: # CODE HERE
[15]: all_elements = s | sc
     print(all_elements)
    {1, 3, 4, 'Technology', 'innomatics', 'hub'}
    Question: Add a list of elements to a set - fruits = {"orange", 'apple', 'kiwi'} - colors = ['or-
    ange', 'red', 'green']
[16]: # CODE HERE
     fruits = {"orange", 'apple', 'kiwi'}
     colors = ['orange', 'red', 'green']
     fruits.update(colors)
     print(fruits)
    {'kiwi', 'apple', 'green', 'orange', 'red'}
[17]: fruits
[17]: {'apple', 'green', 'kiwi', 'orange', 'red'}
    50}
[ ]: # CODE HERE
[19]: set1 = \{10, 20, 30, 40, 50\}
     remove_items = {10, 20, 30}
     set1.difference_update(remove_items)
     set1
[19]: {40, 50}
        Innomatics Research Labs
    www.innomatics.in
[]:
```