IRWA_Lab 1

August 6, 2023

[1]:
```
teams=["India","England","NZ","Aus"]
captain=["Kholi","Root","Williaamson","Smith"]
```

[2]:
```
teams
```

[2]:
```
['India', 'England', 'NZ', 'Aus']
```

[4]:
```
captain
```

[4]:
```
['Kholi', 'Root', 'Williaamson', 'Smith']
```

[5]:
```
concat=zip(teams,captain)
```

[6]:
```
concat
```

[6]:
```
<zip at 0x14665e09780>
```

[7]:
```
print(list(concat))
```

```
[('India', 'Kholi'), ('England', 'Root'), ('NZ', 'Williaamson'), ('Aus',
'Smith')]
```

[ ]:

[8]:
```
answer2 = {i:j for i, j in zip(teams,captain) }
```

[9]:
```
print(answer2)
```

```
{'India': 'Kholi', 'England': 'Root', 'NZ': 'Williaamson', 'Aus': 'Smith'}
```

[ ]:

[ ]:

[10]:
```
books= ["textbooks", "exercise books", "story book", "drawing books"]
prices = [100,60,90,70]
quantities = [3,2,1,4]
```

[11]:
```
for a,b,c  in zip(books,prices,quantities):
    print(f"You bought {c} {a} for $ {c*b}")
```

```
You bought 3 textbooks for $ 300
You bought 2 exercise books for $ 120
You bought 1 story book for $ 90
You bought 4 drawing books for $ 280
```

[ ]:

[ ]:

[12]:
```
answer2
```

[12]:
```
{'India': 'Kholi', 'England': 'Root', 'NZ': 'Williaamson', 'Aus': 'Smith'}
```

[13]:
```
answer2.items()
```

[13]:
```
dict_items([('India', 'Kholi'), ('England', 'Root'), ('NZ', 'Williaamson'),
('Aus', 'Smith')])
```

[14]:
```
answer2
```

[14]:
```
{'India': 'Kholi', 'England': 'Root', 'NZ': 'Williaamson', 'Aus': 'Smith'}
```

[15]:
```
answer3=dict([value,key] for key,value in answer2.items())
answer3
```

[15]:
```
{'Kholi': 'India', 'Root': 'England', 'Williaamson': 'NZ', 'Smith': 'Aus'}
```

[ ]:

[18]:
```
List1 = [2,4,6,8,10]
List2={i+10 for i in List1}
List2
```

[18]:
```
{12, 14, 16, 18, 20}
```

[ ]:

[19]:
```
list1 = [10, 20, 30, 40]
list2 = ["Apples", "Mangoes", "Oranges", "Grapes"]
```

[20]:
```
list1
```

[20]:
```
[10, 20, 30, 40]
```

[21]:
```
list2
```

[21]:
```
['Apples', 'Mangoes', 'Oranges', 'Grapes']
```

[22]:
```
list2.reverse()
```

[23]:
```
list2
```

[23]:
```
['Grapes', 'Oranges', 'Mangoes', 'Apples']
```

[24]:
```
for a,b in zip(list1,list2):
    print(f"{a} {b}")
```

```
10 Grapes
20 Oranges
30 Mangoes
40 Apples
```

[ ]:

[ ]:

[ ]:
```
#incomplete
```

[25]:
```
list1 = ["a", "b", ["c", ["d", "e", ["f", "g"], "k"], "l"], "m", "n"]
sub_list = ["h", "i", "j"]
```

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[26]:
```
#Q 6
```

[27]:
```
List1= [10,15,20,15,32,54,15]
```

[28]:
```
answer6=[]
for i in List1:
    if i==15:
        continue
    else:
        answer6.append(i)
```

[29]:
```
answer6
```

[29]:
```
[10, 20, 32, 54]
```

[ ]:

[30]:
```
#Q 07
```

[31]:
```
dict_1 = {'John': 15, 'Rick': 10, 'Misa': 12}
dict_2 = {'Bonnie': 18,'Rick': 20,'Matt': 16}
```

[32]:
```
dict_1.update(dict_2)
```

[33]:
```
dict_1
```

[33]:
```
{'John': 15, 'Rick': 20, 'Misa': 12, 'Bonnie': 18, 'Matt': 16}
```

[ ]:

[34]:
```
#Q 08
```

[35]:
```
d = {0: 0, 1: 1, 2: 2, 3: 3}
```

[36]:
```
k_old = 0
k_new = 4
d[k_new] = d.pop(k_old)
print(d)
```

```
{1: 1, 2: 2, 3: 3, 4: 0}
```

[ ]:

[ ]:

[37]:
```
#Q 09
```

[38]:
```
country=["USA","France","India"]
```

[39]:
```
capital= ["Washington D.C.","Paris","New Delhi"]
```

[40]:
```
answer9={country[i]:capital[i] for i in range(len(country))}
```

[41]:
```
answer9
```

[41]:
```
{'USA': 'Washington D.C.', 'France': 'Paris', 'India': 'New Delhi'}
```

[ ]:

[ ]:

[42]:
```
# Q 10
```

[43]:
```
My_dict = {"Fruit": "Pear",
"Vegetable": "Carrot",
"Pet": "Cat",
"Book": "Moby dick",
"Crystal": "Amethyst"}
keysToRemove = ["Book", "Crystal"]
```

[46]:
```
for i in keysToRemove:
    My_dict.pop(i)
```

[47]:
```
My_dict
```

[47]:
```
{'Fruit': 'Pear', 'Vegetable': 'Carrot', 'Pet': 'Cat'}
```

[ ]:

[ ]:

[48]:
```
# Q 11
```

[49]:
```
sub_dict = {'math' : 100, 'chem' : 98, 'sci' : 100,'eng':100}
key_to_extract = {'math', 'chem','sci'}
```

[ ]:

[ ]:

[ ]:

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[ ]:

[50]:
```
#Q 12
```

[51]:
```
list1 = [12, 15, 32, 42, 55, 75, 122, 132, 150, 180, 200]
```

[52]:
```
answer12=[]
for i in list1:
    if i%5==0:
        answer12.append(i)
    else:
        continue
```

[53]:
```
answer12
```

[53]:
```
[15, 55, 75, 150, 180, 200]
```

[ ]:

[ ]:

[54]:
```
# Q 13
```

[55]:
```
numbers = [12, 75, 150, 180, 145, 525, 50]
```

[56]:
```
answer13=[]
for i in numbers:
        if i>150:
            continue;
        elif i>500:
            break;
        else:
            if
            answer13=numbers.append(i)
```

```
  Cell In[56], line 8
    if
       ^
SyntaxError: invalid syntax
```

[ ]: