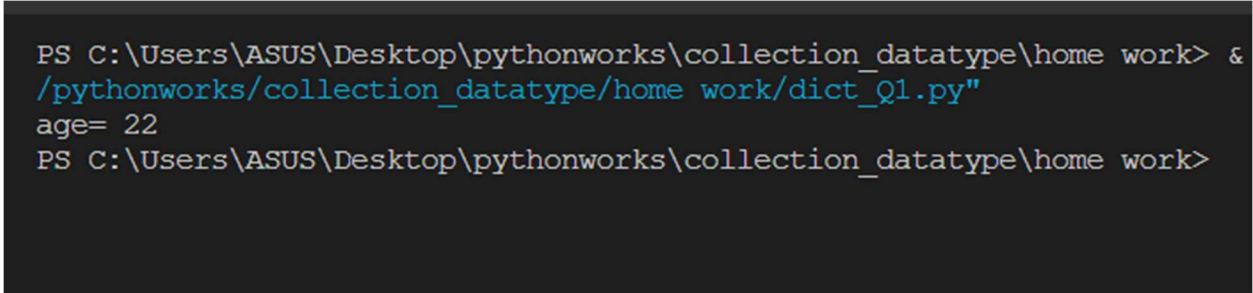


DICT Q1)

```
details={"eison":22,  
        "aswin":23,  
        "jojo":20,  
        "snehal":22,  
        "abhi":23,}  
print("age=",details["eison"])
```

OUTPUT>



```
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> &  
/pythonworks/collection_datatype/home work/dict_Q1.py  
age= 22  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q2)

```
dict1 = {"a": 1, "b": 2}
```

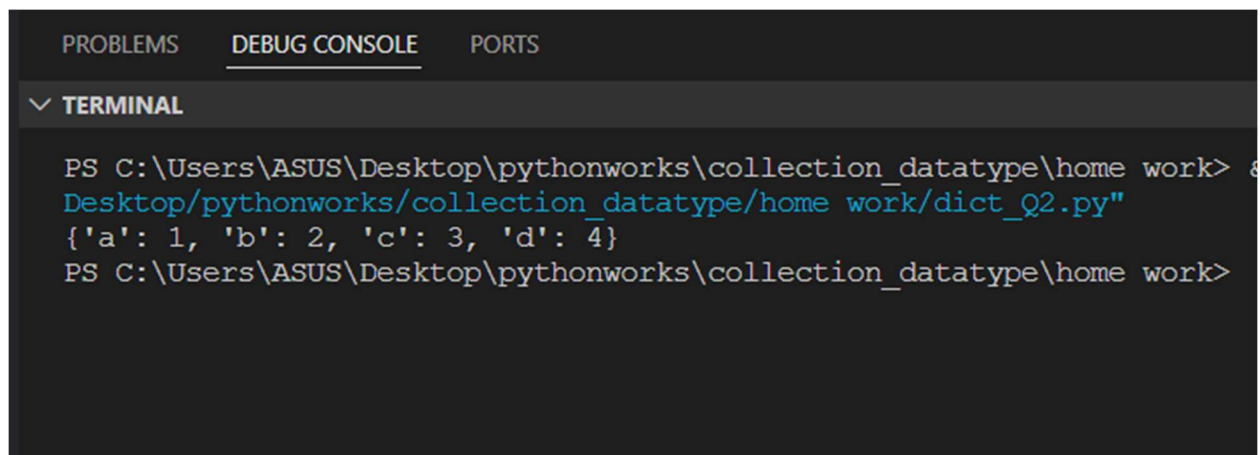
```
dict2 = {"c": 3, "d": 4}
```

```
merged_dict = dict1.copy()
```

```
merged_dict.update(dict2)
```

```
print(merged_dict)
```

OUTPUT>



The image shows a screenshot of a Windows command prompt window. At the top, there are three tabs: 'PROBLEMS', 'DEBUG CONSOLE', and 'PORTS'. Below these tabs is a section labeled 'TERMINAL' with a downward-pointing arrow. The terminal displays the following text: 'PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> & Desktop/pythonworks/collection_datatype/home work/dict_Q2.py' followed by the output '{'a': 1, 'b': 2, 'c': 3, 'd': 4}' and then 'PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>'.

```
PROBLEMS  DEBUG CONSOLE  PORTS
▼ TERMINAL
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> &
Desktop/pythonworks/collection_datatype/home work/dict_Q2.py"
{'a': 1, 'b': 2, 'c': 3, 'd': 4}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q3)

```
score_dict={"appu":75,  
            "ammu":60,  
            "akhil":88,  
            "gokul":95,  
            "praveen":100 }
```

```
total=0
```

```
num=len(score_dict)
```

```
for score_dict in score_dict.values():
```

```
    total+=score_dict
```

```
average_score = total / num if num> 0 else 0
```

```
print(f"The average score is: {average_score:.2f}")
```

OUTPUT>

```
✓ TERMINAL  
  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> .\Desktop/pythonworks/collection_datatype/home work/dict_Q3.py  
The average score is: 83.60  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

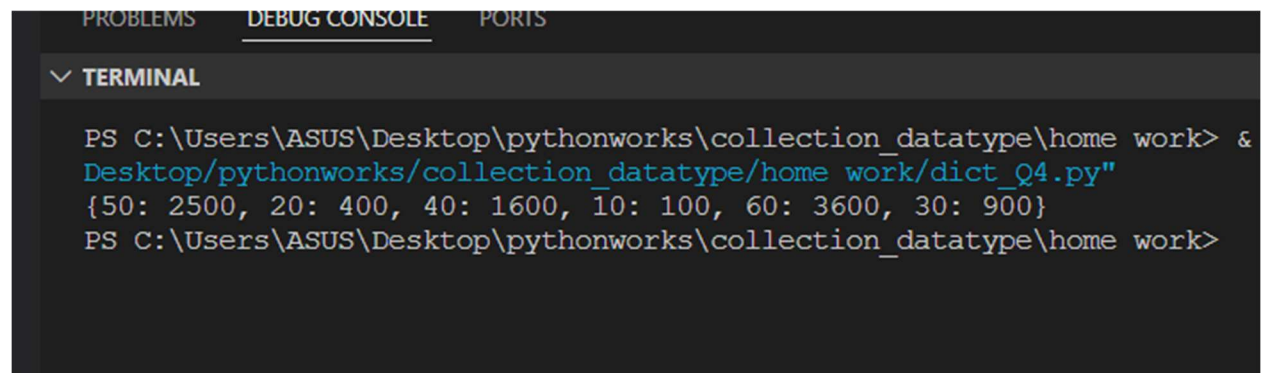
DICT Q4)

```
dict1={10,20,30,40,50,60}
```

```
even_sqr={num:num**2 for num in dict1 }
```

```
print(even_sqr)
```

OUTPUT>



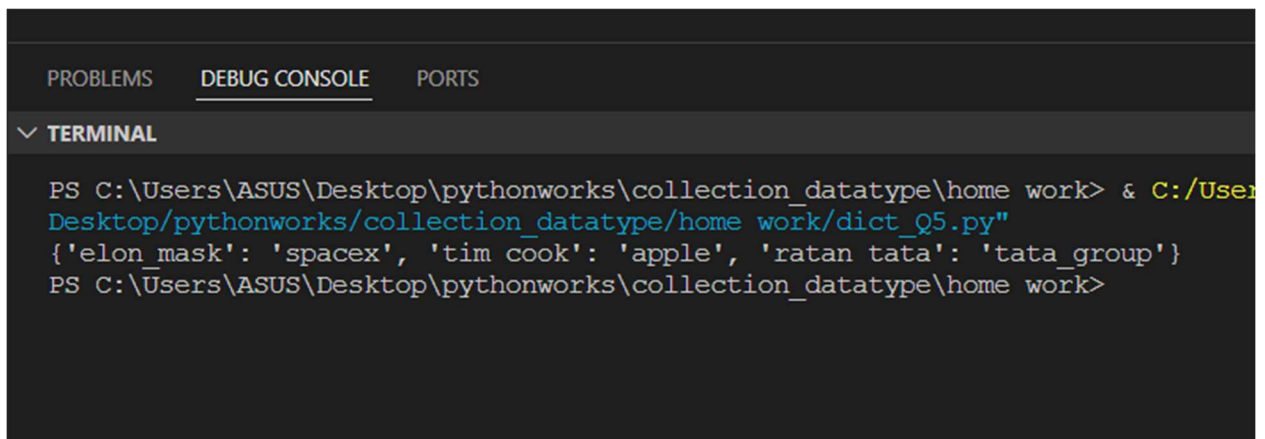
The screenshot shows a terminal window with a dark background. At the top, there are three tabs: 'PROBLEMS', 'DEBUG CONSOLE', and 'PORTS'. The 'DEBUG CONSOLE' tab is selected. Below the tabs, there is a section labeled '✓ TERMINAL'. The terminal content shows a PowerShell prompt 'PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>' followed by a command to run a Python script: '& Desktop/pythonworks/collection_datatype/home work/dict_Q4.py'. The output of the script is displayed on the next line: '{50: 2500, 20: 400, 40: 1600, 10: 100, 60: 3600, 30: 900}'. The prompt then shows the user returning to the PowerShell command line: 'PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>'.

```
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> &
Desktop/pythonworks/collection_datatype/home work/dict_Q4.py"
{50: 2500, 20: 400, 40: 1600, 10: 100, 60: 3600, 30: 900}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q5)

```
owners=["elon_mask","tim cook","ratan tata"]  
owned_company=["spacex","apple","tata_group"]  
owners_product={owners[i]:owned_company[i] for i in range(len(owners))}  
print(owners_product)
```

OUTPUT>



The screenshot shows a VS Code interface with a terminal window open. The terminal title bar includes 'PROBLEMS', 'DEBUG CONSOLE', and 'PORTS'. The terminal content shows a PowerShell prompt at 'C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work' where a command to run a Python script is entered. The script's output is a dictionary mapping owners to their companies.

```
PROBLEMS  DEBUG CONSOLE  PORTS  
✓ TERMINAL  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> & C:/Users/ASUS/Desktop/pythonworks/collection_datatype/home work/dict_Q5.py  
{'elon_mask': 'spacex', 'tim cook': 'apple', 'ratan tata': 'tata_group'}  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q6)

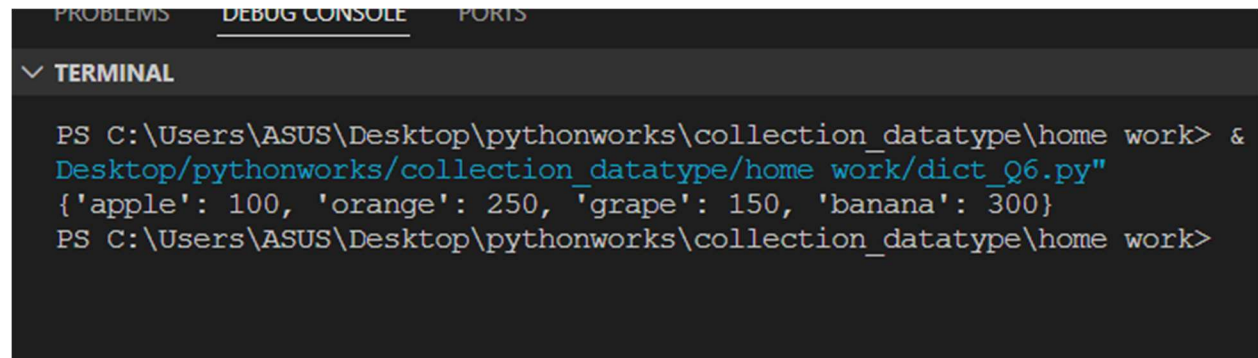
```
fruits=["apple","orange","grape","banana"]
```

```
prices=[100,250,150,300]
```

```
fruits_and_prices={fruits[i]:prices[i] for i in range(len(fruits))}
```

```
print(fruits_and_prices)
```

OUTPUT>



```
PROBLEMS  DEBUG CONSOLE  PORTS
✓ TERMINAL

PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> &
Desktop/pythonworks/collection_datatype/home work/dict_Q6.py"
{'apple': 100, 'orange': 250, 'grape': 150, 'banana': 300}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q7)

```
product={"mobile":30,"soap":60,"alcohol":150}
```

```
new_product={items for items,values in product.items() if values>50}
```

```
print(new_product)
```

OUTPUT>

```
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
Desktop/pythonworks/collection_datatype/home work/dict_Q7.py"
{'soap', 'alcohol'}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q8)

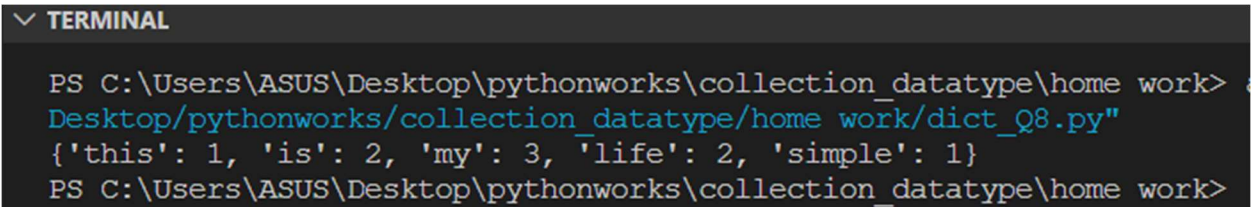
```
text="this is my my life my life is simple"
```

```
words=text.split(" ")
```

```
words_freq={w:words.count(w)for w in words}
```

```
print(words_freq)
```

OUTPUT>

A terminal window with a dark background and a title bar that says "TERMINAL". The terminal shows a PowerShell prompt "PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>" followed by the command to run a Python script: "python Desktop/pythonworks/collection_datatype/home work/dict_Q8.py". The output of the script is a dictionary: {'this': 1, 'is': 2, 'my': 3, 'life': 2, 'simple': 1}. The prompt then shows the user returning to the directory prompt.

```
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> python Desktop/pythonworks/collection_datatype/home work/dict_Q8.py
{'this': 1, 'is': 2, 'my': 3, 'life': 2, 'simple': 1}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```


DICT Q9)

```
dict1={"a":1,"b":-2,"c":3}
```

```
new_dict={k:v*-1 if v<0 else v for k,v in dict1.items()}
```

```
print(new_dict)
```

OUTPUT>

✓ **TERMINAL**

```
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> &
Desktop/pythonworks/collection_datatype/home work/dict_Q9.py"
{'a': 1, 'b': 2, 'c': 3}
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```

DICT Q10)

```
product={"diarymilk":100,  
        "munch":50,  
        "chocobar":25,  
        "snikers":40  
        }
```

```
offer={items:price*0.9 for items,price in product.items()}
```

```
print("MRP=",product)
```

```
print("offer price=",offer)
```

OUTPUT>

```
▼ TERMINAL  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work> & C:/Users/ASUS/  
/pythonworks/collection_datatype/home work/dict_Q10.py  
MRP= {'diarymilk': 100, 'munch': 50, 'chocobar': 25, 'snikers': 40}  
offer price= {'diarymilk': 90.0, 'munch': 45.0, 'chocobar': 22.5, 'snikers': 36.0}  
PS C:\Users\ASUS\Desktop\pythonworks\collection_datatype\home work>
```