```python
# ---------------------------------------
# Class 8: Hands-on exercise using Data Structures
# ---------------------------------------

customer1 = ["Taha", "03000000000", 67, 25]
customer2 = ["Nasir", "03010000000", 55, 20, "xyz@gmail.com"]

#acces data
customer1[4]
Traceback (most recent call last):
  File "<pyshell#9>", line 1, in <module>
    customer1[4]
IndexError: list index out of range

# Dictionary
customer1 = {
    "Name": "Taha",
    "Phone": "03000000000",
    "weight": 67,
    "Age": 25
    }
customer2 = {
    "Name": "Nasir",
    "Phone": "03010000000",
    "weight": 55,
    "Age": 20,
    "Email": "xyz@gmail.com"
    }

customer1.get("Age", "Record not found")
25
customer1.get("Email", "Record not found")
'Record not found'
```

```
customer1.items()
dict_items([('Name', 'Taha'), ('Phone', '03000000000'), ('weight', 67), ('Age
', 25)])

for key, value in customer1.items():
    print(f"{key} --> {value}")



Name --> Taha
Phone --> 03000000000
weight --> 67
Age --> 25

# fromkeys()
keys = ["a", "b", "c"]
my_dict = dict.fromkeys(keys, 0)
my_dict
{'a': 0, 'b': 0, 'c': 0}
```

```python
# Task:
# 1. Create a dictionary and Add student records to it (NAme, Phone, Email)
# 2. Update Email and phone npo
# 3. add Student course into dictionary
# 4. Delete Phone from dictiojary
# 5. get (key, value) pairs from dictionary (.items())

# 1
student = {
    "Name": "Ahsan",
    "Phone": "03000000000",
    "Email": "xyz@gmail.com"
    }

# 2
student.update({"Email": "XYZ@gmail.com", "Phone": "03020000000"})

student
{'Name': 'Ahsan', 'Phone': '03020000000', 'Email': 'XYZ@gmail.com'}

# 3
student["course"] = "AI and DS"

student
{'Name': 'Ahsan', 'Phone': '03020000000', 'Email': 'XYZ@gmail.com', 'course':
'AI and DS'}

# 4
del student['Phone']

student
{'Name': 'Ahsan', 'Email': 'XYZ@gmail.com', 'course': 'AI and DS'}

for key, value in student.items():
    print(f"{key} --> {value}")


Name --> Ahsan
Email --> XYZ@gmail.com
course --> AI and DS
```