Topic 3 - Python Structure & Data Type Assignment

Data Type Declaration

1. Create an empty variable (Points : 5)

```
variable = None
```

1. Create a variable containing your name (Points : 5)

```
name = 'Shellya Nur Atqiya'
name
```

```
'Shellya Nur Atqiya'
```

1. Create a list of 5 items you can find in the classroom (Points : 5)

```
classroom_items=['table','chair','board','marker','book']
classroom_items
```

```
['table', 'chair', 'board', 'marker', 'book']
```

1. Create a dictionary containing 2 keys and value (Points : 5)

```
menu={'Food':['Nasi Goreng','Mie Goreng','Soto','Sate','Bakso'],
      'Price':['Rp15.000','Rp20.000','Rp25.000','Rp30.000','Rp35.000']}
menu
```

```
{'Food': ['Nasi Goreng', 'Mie Goreng', 'Soto', 'Sate', 'Bakso'],
 'Price': ['Rp15.000', 'Rp20.000', 'Rp25.000', 'Rp30.000',
'Rp35.000']}
```

Basic Data Operation

You sold 20 pieces of electronics at the price of 12000. The customer gets a total discount of 10%.

Below are those variables:

1. price=12000
2. quantity_sold=20
3. discount=10%

Using Python code, write the code the find the total money that the customer to pay. (Points : 15)

```
price=12000
quantity_sold=20
discount=0.1
```

```
total_price=price*quantity_sold
discount_earned=0.1*total_price
total_money=total_price-discount_earned
total_money
```

```
216000.0
```

List Data Operation

1. Follow the instructions in the code blocks

```
# Create list of countries in the world (total 7 countries) (Points :
5)

countries=['Indonesia','Swiss','Singapore','Turki','New
Zealand','South Korea','Japan']
countries
```

```
['Indonesia',
 'Swiss',
 'Singapore',
 'Turki',
 'New Zealand',
 'South Korea',
 'Japan']
```

```
# Get 4 countries from the first index of the list (Points : 5)

countries[0:4]
```

```
['Indonesia', 'Swiss', 'Singapore', 'Turki']
```

```
# Append new country to the list (Points : 5)

countries.append('Canada')
countries
```

```
['Indonesia',
 'Swiss',
 'Singapore',
 'Turki',
 'New Zealand',
 'South Korea',
 'Japan',
 'Canada']
```

```
# Drop one country from the list (Points : 5)

countries.remove('Japan')
countries
```

```
['Indonesia',
 'Swiss',
 'Singapore',
 'Turki',
 'New Zealand',
 'South Korea',
 'Canada']
```

```
# Get country in the last index (Points : 5)

countries[-1]
```

```
'Canada'
```

Dictionary Data Operation

1. Follow the instructions below

```
# Given the dictionary below

customer={
    "name":['Dio','Eka','Wayu','Riki'],
    "age":[20,19,24,39],
    "gender":[1,0,0,1],
    "membership":['Platinum','Gold','Silver','Silver']
}

# Print all keys in customer (Points : 5)

dict.keys(customer)
```

```
dict_keys(['name', 'age', 'gender', 'membership'])
```

```
# Print all customer names (Points : 5)

customer['name']
```

```
['Dio', 'Eka', 'Wayu', 'Riki']
```

```
# Print the first customer name (Points : 5)

customer['name'][0]
```

```
'Dio'
```

```
# Drop "age" key from the dictionary (Points : 5)

del customer['age']
customer
```

```
{'name': ['Dio', 'Eka', 'Wayu', 'Riki'],
 'gender': [1, 0, 0, 1],
 'membership': ['Platinum', 'Gold', 'Silver', 'Silver']}
```

```
# Replace customer gender list value (Points : 20)
# gender 1 => Male
# gender 0 => Female
```

```
customer.update({'gender':['Male','Female','Female','Male']})
customer
```

```
{'name': ['Dio', 'Eka', 'Wayu', 'Riki'],
 'gender': ['Male', 'Female', 'Female', 'Male'],
 'membership': ['Platinum', 'Gold', 'Silver', 'Silver']}
```