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|  | **ISD lab sheet session 9**  For the practical part of this lab please save the Python programs that you create and take screenshots of the execution (evaluation) of your programs. |
| 1. | Consider the class:  **class Person():**  **def \_\_init\_\_(self, firstName) :**  **self.\_name = firstName**  If an object is constructed as  **harry = Person("Harry")** what is the value of its instance variable **\_name**?  harry.\_name = “Harry” |
| 2. | Provide an implementation for a Person constructor so that after the call p = Person() the **\_name** instance variable of p is "**unknown**"  **class Person():**  **def \_\_init\_\_(self) :**  **self.\_name = “unknown”** |
| 3. | A simulated cash register that tracks the item count and the total amount looks like this: due  class **CashRegister** :  **# Comment 1**  def **\_\_init\_\_**(*self*) :  *self*.\_itemCount = 0  *self*.\_totalPrice = 0.0    **# Comment 2**  def **addItem**(*self*, price) :  *self*.\_itemCount = *self*.\_itemCount + 1  *self*.\_totalPrice = *self*.\_totalPrice + price    **# Comment 3**  def **getTotal**(*self*) :  return *self*.\_totalPrice    **# Comment 4**  def **getCount**(*self*) :  return *self*.\_itemCount  **# Comment 5**  def **clear**(*self*) :  *self*.\_itemCount = 0  *self*.\_totalPrice = 0.0 |
| 3a. | Add comments 1 to 5 to explain the above code as requested |
| 3b. | What are the values of **register1.\_itemCount, register1.\_totalPrice, register2.\_itemCount, and register2.\_totalPrice** after these statements?   |  | | --- | | **register1 = CashRegister()** | | **register1.addItem(0.90)** | | **register1.addItem(0.95)** | | **register2 = CashRegister()** | | **register2.addItem(1.90)** | |
| 3c. | Implement a method **getPounds** of the **CashRegister class** that yields the amount of the total sale as a sterling value without the pence. |
| 3d. | Define and implement a method **giveChange(self, payment)** for the **CashRegister class** that gives change for the provided payment. |