

Graded Assignment 3

Close

5 points

1) In the "Paragraph Words" dataset, the procedure **CountLongNouns** counts the number of nouns that are longer than the average word length. Assume that the variable **Avg** holds the value of average word length. Choose the correct choice to complete the procedure.

```
Procedure CountLongNouns()
while (Pile 1 has more rows) {
  Read the top card X from Pile 1
  *****
  *   Fill the code   *
  *****
}
Move X to Pile 2
}
```

☐

```
if (X.LetterCount > Avg) {
  Count = Count + 1
}
```

☐

```
if (X.PartOfSpeech == "Noun") {
  Count = Count + 1
}
```

☐

```
if (X.LetterCount > Avg or X.PartOfSpeech == "Noun") {
  Count = Count + 1
}
```

☒

```
if (X.LetterCount > Avg and X.PartOfSpeech == "Noun") {
  Count = Count + 1
}
```

☐

None of the above

2) The following pseudocode is executed using the "Scores" dataset. What will be the value of the variable **Z** at the end of the execution? [Note: Consider only two decimal places in all division operations.] **4 points**

```
SumT = 0, SumM = 0, SumP = 0, SumC = 0
Count = 0
while (Pile 1 has more cards) {
    Read the top card X from Pile 1
    SumT = SumT + X.Total
    SumM = SumM + X.Mathematics
    SumP = SumP + X.Physics
    SumC = SumC + X.Chemistry
    Count = Count + 1
    Move X to Pile 2
}
A = SumT / Count
B = SumM / Count
C = SumP / Count
D = SumC / Count
Z = 0
if ((B + C + D) - A ≤ -1) {
    Z = -1
}
if ((B + C + D) - A ≥ 1) {
    Z = 1
}
```

☐ -1

☒ 0

☐ +1

☐ None of the above

```

        SubC = SubC + 1
    }
    if (X.Physics < AvgP) {
        SubC = SubC + 1
    }
    if (X.Chemistry < AvgC) {
        SubC = SubC + 1
    }
    *****
    *   Fill the code   *
    *****
}
Move X to Table 2
}

```

☐

```

if (SubC ≤ 1) {
    CountBA = CountBA + 1
}

```

☐

```

if (SubC ≤ 1) {
    CountBA = 1
}

```

☐

```

if (SubC == 1) {
    CountBA = 1
}

```

☒

```

if (SubC == 1) {
    CountBA = CountBA + 1
}

```

```

        A = A + 1
    }
    if (X.ShopName == "Big Bazaar" and X.TotalBillAmount > MBB) {
        B = B + 1
    }
    Move X to Pile 1
}

```

☐

A = Number of bills with total bill amount less than the average total bill amount

B = Number of bills with total bill amount greater than the average total bill amount

☐

A = Number of bills from "Big Bazaar" with total bill amount greater than the average total bill amount of "Big Bazaar"

B = Number of bills from "SV Stores" with total bill amount less than the average total bill amount of "SV Stores"

☒

A = Number of bills from "SV Stores" with total bill amount less than the average total bill amount of "SV Stores"

B = Number of bills from "Big Bazaar" with total bill amount greater than the average total bill amount of "Big Bazaar"

☐

A = Number of bills with total bill amount greater than the average total bill amount

B = Number of bills with total bill amount less than the average total bill amount

```

    }
    if (X.TotalBillAmount < SecondT and X.TotalBillAmount > ThirdT) {
        ThirdT = X.TotalBillAmount
    }
    Move X to Pile 2
}
Count = 0
while (Pile 2 has more cards) {
    Read the top card X from Pile 2
    *****
    *   Fill the code   *
    *****
    Move X to Pile 1
}

```

☐ if (**X.TotalBillAmount** < **ThirdT**) {
 Count = Count + 1
 }

☐
 if (**X.TotalBillAmount** ≥ **FirstT**) {
 Count = Count + 1
 }

☐
 if (**X.TotalBillAmount** > **ThirdT**) {
 Count = Count + 1
 }

☒ if (**X.TotalBillAmount** ≥ **ThirdT**) {
 Count = Count + 1
 }

☐ None of the above

Graded Assignment 3

Close

11) The following pseudocode is executed using the "Shopping bills" dataset. What will the values of **A**, **B** and **C** represent at the end of the execution? **3 points**

```
A = 0, B = 0, C = 0
while (Pile 1 has more cards) {
    Read the top card X from Pile 1
    A, B, C = DoSomething(X, A, B, C)
    Move X to Pile 2
}

Procedure DoSomething(Y, A, B, C) {
    if (Y.ShopName == "SV Stores" and Y.TotalBillAmount > A) {
        A = Y.TotalBillAmount
    }
    if (Y.ShopName == "Big Bazaar" and Y.TotalBillAmount > B) {
        B = Y.TotalBillAmount
    }
    if (Y.ShopName == "Sun General" and Y.TotalBillAmount > C) {
        C = Y.TotalBillAmount
    }
    return ([A, B, C])
End DoSomething
```

- ☐ Maximum total bill amount of each customer
- ☒ Maximum total bill amount of each shop
- ☐ Shop name of the bill with maximum total bill amount
- ☐ Maximum total bill amount