COP 2220 Week 1 Assignments

Due 11:59 PM Monday September 3

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**Review Questions**

1. D
2. C
3. A
4. D
5. B
6. C
7. A
8. B
9. C
10. B

**Exercises**

* 1. Repeat (5 times)

Harold takes 1 step forward

End repeat

* 1. Harold steps over Ginger the cat
  2. Repeat (until chair is directly in front of Harold)

Harold takes 1 step forward

End repeat

* 1. Repeat (2 times)

Harold turns left 90 degrees

End repeat

* 1. Harold sits down in chair

1. Enter the customer’s age and the sales amount
2. If (customer’s age is less than 55)

Calculate the discount by multiplying the sales amount by 10%

Else

Calculate the discount by multiplying the sales amount by 15%

End if

1. Calculate the amount due by subtracting the discount from the sales amount
2. Display the amount due

Repeat for (each customer buying a TV)

Enter the original price of the TV

If (the customer is an employee)

Calculate the discount by multiplying the original price of the TV by 25%

Else

Calculate the discount by multiplying the original price of the TV by 15%

End if

Calculate the total due by subtracting the discount from the original price

Print a bill showing the original price, discount, and total due

End repeat

* 1. Repeat (4 times)

Enter a number

End repeat

* 1. Calculate the sum by adding the number to the sum
  2. Calculate the average by diving the sum by 4
  3. Display the average

Repeat for (each component name on the list)

Read the component name from the list

Search for the component

If (the component was received)

Cross the name off the list

Else

Circle the component name on the list

End if

End repeat

* 1. First algorithm() {

Repeat for (each customer)

Enter the number of tickets

If (the number of tickets is greater than four)

Display the message “You can purchase up to four tickets only.”

If (the number of tickets is less than or equal to four)

Calculate the amount owed by multiplying the number of tickets by $35

Display the amount owed

End if

End repeat

}

* 1. Second algorithm() {

Repeat for (each customer)

Enter the number of tickets

If (the number of tickets is less than or equal to four)

Calculate the amount owed by multiplying the number of tickets by $35

Display the amount owed

Else

Display the message “You can purchase up to four tickets only.”

End if

End repeat

}

Repeat (until Harold is on the other side of the flowerbed)

If (the flower is red)

Harold picks the flower up with his right hand

Harold walks forward one complete step

Else

Harold picks the flower up with his left hand

Harold walks forward one complete step

End if

End repeat

Repeat for (each employee)

Enter the employee’s name, hours worked, and pay rate

If (hours worked is less than or equal to 40)

Calculate gross pay = hours worked times pay rate

Else

Calculate regular pay = pay rate times 40

Calculate overtime hours = hours worked minus 40

Calculate overtime pay = overtime hours times 1.5 times pay rate

Calculate gross pay = regular pay plus overtime pay

End if

Print the employee’s name and gross pay

End repeat

Repeat for (each employee)

Enter the employee’s payment schedule and annual salary

If (the employee’s payment schedule is weekly)

Calculate gross pay = annual salary times 52

Else

Calculate gross pay = annual salary times 26

End if

Print gross pay

End repeat



































