Logic Assignment: I want you to play computer. Step through these problems and determine the result.

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| --- | --- |
| start var1 = 10 var2 = 20 wksum = 0 rslt = 0 do while var2 < 30 wksum = var1 + var2 if wksum > 30 var1 = var1 - 2 var2 = var2 + 1 else var1 = var1 - 1 var2 = var2 + 3 end if end while loop rslt = var1 + var2 display rsltend  | Problem #1: Using the pseudocode to the left follow the logic. When the pseudocode displays rslt, what number will rslt be? |
| start var1 = 10 var2 = 20 wksum = 0 rslt = 0 do until var2 > 30 wksum = var1 + var2 if wksum > 30 var1 = var1 - 2 var2 = var2 + 1 else var1 = var1 - 1 var2 = var2 + 3 end if end until loop rslt = var1 + var2 display rsltend  | Problem #2: Using the pseudocode to the left follow the logic. When the pseudocode displays rslt, what number will rslt be? |
| start var1 = 10 var2 = 20 wksum = 0 rslt = 0 do until var2 >= 30 wksum = var1 + var2 if wksum > 30 var1 = var1 - 2 var2 = var2 + 1 else var1 = var1 - 1 var2 = var2 + 3 end if end until loop rslt = var1 + var2 display rsltend | Problem #3: Using the pseudocode to the left follow the logic. When the pseudocode displays rslt, what number will rslt b? |
| Problem #4: Did you get the same answer for 2 of the three problems above. If so explain why with a focus on the loop conditions. If not explain why with a focus on the loop conditions. |
| start var1 = 10 var2 = 20 wksum = 0 rslt = 0 do while var2 < 30 calculate() end while loop rslt = var1 + var2 display rsltend calculate() wksum = var1 + var2 if wksum > 30 var1 = var1 - 2 var2 = var2 + 1 else var1 = var1 - 1 var2 = var2 + 3 end ifreturn | **Problem #5: When the pseudocode displays rslt, what number will rslt be?****Note: When you execute a procedure or module like** **calculate(), you branch out to the procedure or module and****execute it and then return and continue executing the main code.** |
| start amt1 = 1 amt2 = 2 ans = 0 do while amt2 < 15 if amt1 > 10 amt1 = amt1 + 1 amt2 = amt2 + 1 else amt1 = amt1 + 5 amt2 = amt2 + 5 end if end while loop ans = amt1 + amt2 display ansend | Problem #6: When the pseudocode displays ans, what number will ans be? |
| Inventory File/Table where each record is invenRecord.

|  |  |  |  |
| --- | --- | --- | --- |
| itemNo | onHand | onOrder | reOrdPt |
| 11111 | 20 | 40 | 50 |
| 22222 | 20 | 30 | 50 |
| 33333 | 25 | 15 | 50 |
| 44444 | 10 | 50 | 75 |
| 55555 | 20 | 0 | 40 |
| 66666 | 10 | 25 | 25 |
| EOF |  |  |  |

Note EOF means End of File | Problem #7: Show the output that would be generated if this pseudocode was executed using the data shown. Note that I want to see the output from each of the records you process. |
| start read invenRecord do while not endOfFile totInven = onHand + onOrder if totInven > reOrdPt toOrder = 0 else toOrder = (reOrdPt – (onHand + onOrder)) + 100 end if display toOrder read invenRecord end do while loopstop program |
| Inventory File where each record is invenRecord.

|  |  |  |  |
| --- | --- | --- | --- |
| itemNo | onHand | onOrder | reOrdPt |
| 11111 | 20 | 40 | 50 |
| 22222 | 20 | 30 | 50 |
| 33333 | 25 | 15 | 50 |
| 44444 | 10 | 50 | 75 |
| 55555 | 20 | 0 | 40 |
| 66666 | 10 | 25 | 25 |
| EOF |  |  |  |

 | Problem #8: Show the output that would be generated if this pseudocode was executed using the data shown. Note that I want to see the output from each of the records you process. |
| start read invenRecord do while not endOfFile calcToOrder() display toOrder read invenRecord end do while loopstop programcalcToOrder() totInven = onHand + onOrder if totInven > reOrdPt toOrder = 0 else toOrder = reOrdPt – (onHand + onOrder)) \* 1.5 end ifreturn |
| Inventory File where each record is invenRecord.

|  |  |  |  |
| --- | --- | --- | --- |
| itemNo | onHand | onOrder | reOrdPt |
| 11111 | 20 | 40 | 50 |
| 22222 | 20 | 30 | 50 |
| 33333 | 25 | 15 | 50 |
| 44444 | 10 | 50 | 75 |
| 55555 | 20 | 0 | 40 |
| 66666 | 10 | 25 | 25 |
| EOF |  |  |  |

 | Problem #9: Show the output that would be generated if this peudocode was executed using the data shown. Note that I want to see the output from each of the records you process. |
| start read invenRecord do while not endOfFile processRecord() read invenRecord end do while loopstop programprocessRecord() if onHand > onOrder display onHand else totInven = onHand + onOrder if totInven > reOrdPt display totInven else display message “need to check” end if end ifreturn  |