### **Key Words to use while writing your Pseudocode**

### **Communicating with the User**

- Ask User: "Question"
- **Get**: Variable that will contain answer
  - o Always follow-up an "Ask" with a "Get"
- **Tell User**: "Statement"
- Tell User: "Statement" + <variableName>
- **Tell User**: "Statement1" + <variableName> + "Statement2"

## Performing a calculation

- Calculate or Compute: value that needs to be calculated
  - o E.g. Calculate: Tax or Compute: Grand Total
- Worksheet must also contain the key formula for the value be calculated
  - o E.g. Tax = Sub-Total \* Tax Rate
  - o E.g. Grand Total = Sub-Total + Tax Amount

#### Branching - if-then-else

- **If** (expression to be evaluated)
  - o Then:
    - do this
  - o Else:
    - do that

### Example:

- if (numberGrade < 64)
  - o Then:
    - Status = 'Fail'
  - o Else
    - Status = 'Pass'

Use "and", "or", "not" to combine or negate test conditions

- If: (purchaseType = "clothing") or (purchaseType = "food")
  - o Then:
    - totalCost = Price
  - o Else:
    - totalCost = Price + Tax
- Use **nested numbering** to denote the yes / true path vs. the no / false path.
  - O Always put the yes / true path first, then the no path, E.g.

### Key Words to use while writing your Pseudocode

• 1. If: Price > \$100

Then

- (Yes path) 1.A Compute: Total = Price (Price \* Discount)
- Else
  - (No path) 1.B Compute: Total = Price

### Branching - case / switch statements

- Perform action Based On Variable
  - o E.g. Set Price Based On Product-Selected
  - o E.g. Set Letter-Grade Based On Number-Grade
  - o E.g. Set Discount Amount Based On Day-of-the-Week
- Follow-up the above statement with a table showing the different applicable actions based on the value contained in the variable, including the "default" option if applicable,
  - o E.g. Set Price Based On Product-Selected

Product-Selected	Price
Shirt	\$5
Pants	\$25
Gloves	\$10

o E.g. Set Discount Amount Based On Day-of-the-Week

Day-of-the-Week	<b>Discount Amount</b>
Tuesday	10%
Wednesday	10%
Thursday	10%
Default	0%

o E.g. Tell user what prize they've won **Based On** Number-Selected-By-User

Number-Selected-By-User	Tell User
1	"You have won a large prize"
2	"You have won a medium prize"
3	"You have won a small prize"
Default	"You have not won any prize"

# Looping

- For counter=1 up to maxValue Do:
  - o Action to be repeated
- **For** counter = startValue **down to** 1 **Do**:
  - o Action to be repeated
- While (expression to be evaluated) Do:
  - o Action to be repeated