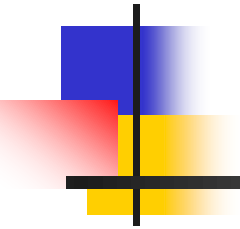
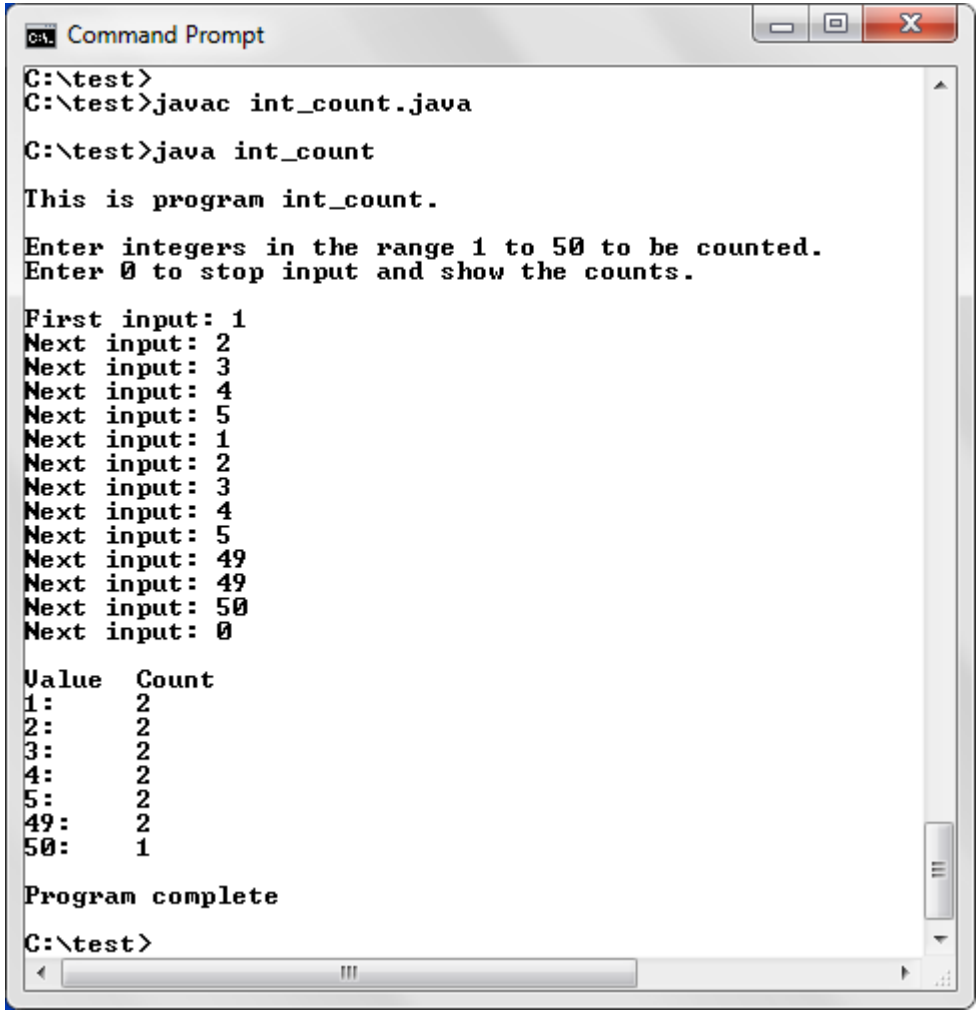


Project 9: Counting Integers

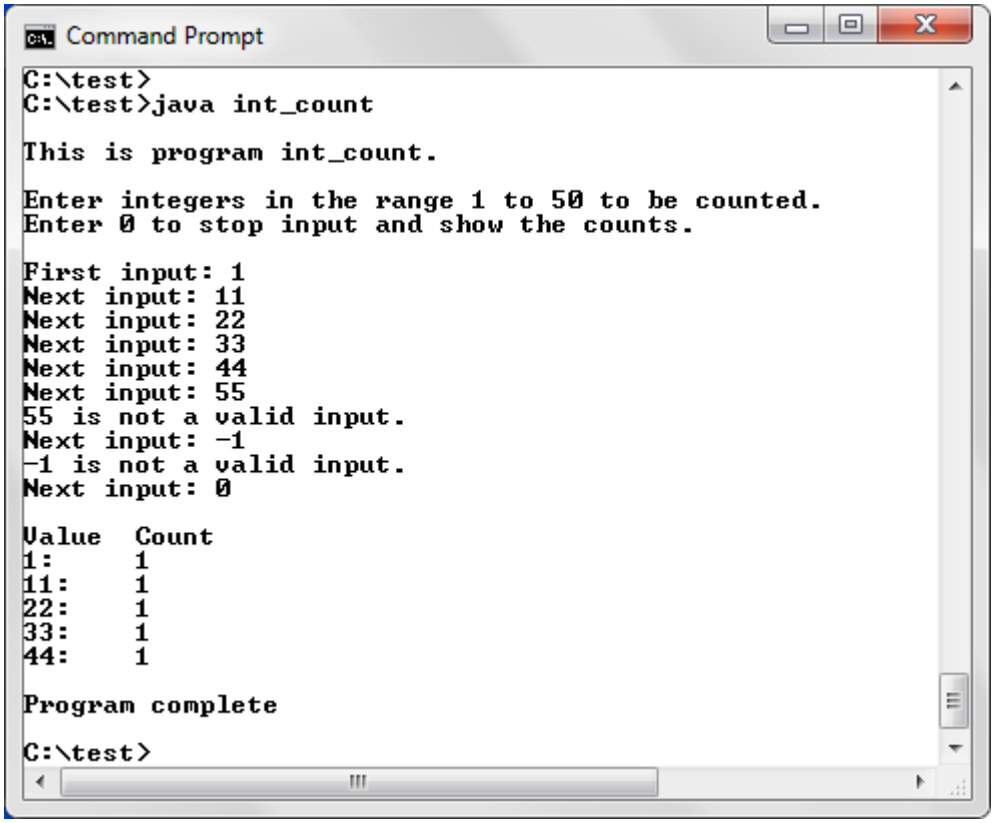
Project 9: Counting Integers

- Write a program that reads an arbitrary number of integers in the range 1 to 50 from the keyboard and then outputs how many of each value were read.
  - Do not output zero counts.
- Prompt the user for inputs as shown in the sample run.
- Let the user enter 0 to terminate input.
- Any other value outside the range 1 to 50 should get an error message.

Sample Run


Command Prompt
C:\test>
C:\test>javac int_count.java
C:\test>java int_count
This is program int_count.
Enter integers in the range 1 to 50 to be counted.
Enter 0 to stop input and show the counts.
First input: 1
Next input: 2
Next input: 3
Next input: 4
Next input: 5
Next input: 1
Next input: 2
Next input: 3
Next input: 4
Next input: 5
Next input: 49
Next input: 49
Next input: 50
Next input: 0
Value Count
1: 2
2: 2
3: 2
4: 2
5: 2
49: 2
50: 1
Program complete
C:\test>

Sample Run with Invalid Inputs



Specifications

- Output a heading for the counts, as shown in the sample runs.

- Note the alignment of the counts.
- The first digit of each count should be aligned with the C in the heading.

- Pay close attention to the prompts. Your output should match the sample runs for the same inputs.

Implementation Tips

- Use an array of length 51 for the counts.
- When an input in the range from 1 to 50 is received, increment the count in the corresponding array element.
- When the user enters 0, signaling end of input, use a "for" loop to output the nonzero counts.

Submission

- Put your Java source file into a folder and zip it.
- Submit your zipped Java source file via Canvas Assignments.

- Project is due by 11:59 PM, Sunday, March 6.
  - All sections.

- Recommendation:

  Do this project in your lab session or help session.

Ground Rules

- It is OK to *discuss* the project with other students BUT
  - Do not share your code with other students.
  - Before or after submitting the project.
- Do not copy any other student's code.
  - Or even look at it.
- Do not let anyone copy or examine your code.

Ground Rules

Except for code posted on the class web site

- Do not copy code from the Internet
  - or any other source (other than the textbook.)
- Do not ask for help on an Internet forum.
  - If you need help, ask your instructor or a TA.
  - Come to lab and help sessions.
- Write your own code.