

Problem 1

- ① -0.5 You cannot call `str.equals("")` if `str` is null. This results in a null-pointer exception. Instead, check that `str` is not null before making the call. (e.g. with the condition of an if or while statement.)
- ② -0.5 You cannot call `str.equals(null)` if `str` is null. This results in a null-pointer exception. Instead, you should use `str == null`. (no additional penalty if both ① & ② made)
- ③ -1 You cannot call `Integer.parseInt(str)` if `str` is not a number (e.g., an empty string or null). Check for these conditions before calling `parseInt`.
- ④ Use `==` for comparison, not `=`.
- ⑤ -0.5 You cannot compare an integer with null. You also cannot compare an integer with true or false. You also cannot compare an integer with the type `int`. Instead, consider the original variable that is returned by `JOptionPane.showInputDialog(...)` and make sure that it is reasonable (not null or empty) before calling `parseInt`.
- ⑥ -2 You must use a loop (e.g. while) to re-show the dialog. This ensures that if the user presses cancel multiple times, the program will continue to reprompt the user.
- ⑦ -0.5 You must only repeat the prompt if escape occurs. In the other two cases (valid input or empty string) you should exit the loop.
- ⑧ -0.5 Use `str.equals("")`, not `str == ""` for comparison.
- ⑨ -0.5 Must pass input `str` to `Integer.parseInt(str)`.
- ⑩ -1 Must check for both cases where string is null and where string is empty.