

Marking Scheme of Assignment 3

CSCI1530 Computer Principles and Java Programming

I. General Marking Scheme

Category	Sub-category	Score
1. Naming	Zip package naming & File naming	5
	Project naming & Package naming	5
2. Personal Information & Comments	Student name, ID & Declaration	5
	Comments	5
3. Compilation and execution	No errors	10
4. Properties of 3 animals	Correct format	10
5. Results and bar chart	Test case 1 (specification)	10
	Test case 2 (fixed)	10
	Test case 3 (fixed)	10
	Test case 4 (random)	10
	Test case 5 (random)	10
6. Try again dialog	Correct implementation	10
Total		100

II. Specification

1. The names of zip package, project, package and .java file should be *ProblemSolver.zip*, *ProblemSolver*, *problemSolver* and *ProblemSolver.java* respectively.
2. Corresponding student name, student ID and date should be filled into the specified position in the annotation. Sufficient comments should be filled into correct position of the code.
3. The program should be free of any compilation errors or runtime exception. For each kind of error/exception, mark is deducted by 5 (max deduction: 10).
4. The title and animal properties message should be displayed in the same format as the specification. For each line not matching, mark is deducted by 2 (max deduction: 10).
5. During testing, five test cases are prepared, including one from the specification, two fixed ones and two random inputs. At least one of them has no solutions. For each wrong answer, mark will be deducted by 10. If the program shows correct answer but fails to display corresponding bar chart and legends, mark will be deducted by 5 for each case.
6. The try again function should be implemented as mentioned in the specification, which will be used during previous testing stage.

Example test cases:

test case 1:

choose one of the three in specifications

test case 2:

5 heads, 8 wings, 6 legs

No solutions (-1 pig, 3 ducks, 1 dragon)

test case 3:

60 heads, 40 wings, 80 legs

(20 dragons)

test case 4:

20 heads, 18 wings, 44 legs

(5 pigs, 6 ducks, 3 dragons)

test case 5:

37 heads, 30 wings, 70 legs

No solutions (6 pigs, 7 ducks, 8 dragons)