CS 2163 JAVA

Assignment 1

Assignment worth 40 points

The assignment is a modification of Programming Exercise 3.18 (Page 113).

Accept distance to ship from user and use the table below for weight criteria:

|  |  |
| --- | --- |
| Weight of package | Rate per 500 miles shipped |
| 1 pound or less | $3.50 |
| Over 1 pound but not more than 5 pounds | $5.50 |
| Over 5 pounds but not more than 10 pounds | $8.50 |
| Over 10 pounds but not more than 20 pounds | $10.50 |

Distance accepted cannot be less than 10 miles or more than 3000 miles.

Packages will not be shipped if distances are not within the permissible range of shipping.

Distance will be accepted only if the weight is valid.

Example: For a package of 2 pounds shipped 1200 miles, the shipping charges will be $11.00

Example: For a package of 21 pounds, display “The package cannot be shipped”

Example: For a package of -2 pounds, display “Invalid input”

Extra Credit: If a user enters a weight over 20 pounds or a negative number, display the error message and allow them to re-enter a valid number.

Example: For a package of -2 pounds, display “Invalid input”, and prompt them to try again

Complete the program and upload the solution for this problem using your last name

Example: **Kelly\_Assignment1.java**

**Assignment Grading Sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Grading Criteria** | **Total Points** | **Points Deducted** | **Comments** |
| Weight accepted and range checked | 5 |  |  |
| Distance accepted and range checked | 5 |  |  |
| Distance accepted only if the weight is valid | 5 |  |  |
| Shipping charges calculated and displayed only with valid values | 10 |  |  |
| Variables defined | 5 |  |  |
| Good documentation – file headers, indentation, variable names etc. | 5 |  |  |
| File saved and uploaded correctly, program compiled with no errors | 5 |  |  |
| Total Points | 40 |  |  |
| Extra Credit | 4 |  |  |

**Sample Run 1:**

Enter the weight of package (in pounds): -1

Invalid input

Try again

Enter the weight of package (in pounds): 1

Enter the distance of shipping: 500

The total cost: $3.5

**Sample Run 2:**

Enter the weight of package (in pounds): 3

Enter the distance of shipping: 4000

The distance is out of the permissible range of shipping.

**Sample Run 3:**

Enter the weight of package (in pounds): 11

Enter the distance of shipping: 1000

The total cost: $21.0