Import JOptionPane

Import Toy

Import Math

Declare string name, toyChoice, answer, balloon, card

Declare int age

Declare boolean ageOk

Declare boolean ageAppropriateLoop, anotherGiftLoop

Declare double totalCost

ShowMessageDialog Welcome

do

do

Set name equal to ShowInputDialog Ask for name

Set age equal to parseInt showInputDialog Ask for age

Set toyChoice equal to showInputDialog Ask for to choice

While toyCoice is not equal to plushies blocks or books

Set toyChoice equal to showInputDialog Ask for thie choice. Press ‘X’ to exit.

Declare new Toy object toy with params toyChoice and age

Set ageOk to toy.ageOk

Set answer showInputDialog Is ageOk and would they like to cancel ‘yes’ ‘no’

While answer is not equal to ‘yes’ or ‘no’

Set answer showInputDialog like to cancel ‘yes’ ‘no’. Only ‘yes’ ‘no’

If answer is ‘yes’

Set ageAppropriateLoop to true

Else

Set ageAppropriateLoopto false

While ageAppropriateLoop

Set ballon equal to ShowInputDialog Ask for balloon ‘yes’ ‘no’

While balloon iis not equal to ‘yes’ or ‘no’

Set ballon showInputDialog Ask for balloon ‘yes’ ‘no’

If balloon equal yes

toy.addBalloon(balloon)

Set card equal to ShowInputDialog Ask for card‘ yes’ ‘no’

While card is not equal to ‘yes’ or ‘no’

Set cardshowInputDialog Ask for card ‘yes’ ‘no’

If card equal yes

toy.addCard(card)

Set totalCost equal to toy.getCost()

Set answer showInputDialog would you like another gift ‘yes’ ‘no’

While answer is not equal to ‘yes’ or ‘no’

Set answer showInputDialog like to another gift ‘yes’ ‘no’. Only ‘yes’ ‘no’

If answer is ‘yes’

Set anotherGiftLoop to true

Else

Set anotherGiftLoop to false

while(anothergiftLoop)

Double formattedCost = Format totalCost

Sysout Total amount + formattedCost + Order number + Math.rand five digits

Sysout Abdul Akibu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case # | Input | Actual Input | Expected Output | Actual Output | Did the test pass? |
| 1 | Name = me Age = 5  Toy = plushie Age Answer =no Balloon = no  Card = no  Othergift = no | Name = me Age = 5  Toy = plushie Age Answer =no Balloon = no  Card = no  Othergift = no | Total cost 25 | Total cost 25 | yes |
| 2 | Name = me Age = 5  Toy = plushie Age Answer =no Balloon = no  Card = no  Othergift = yes same as above | Name = me Age = 5  Toy = plushie Age Answer =no Balloon = no  Card = no  Othergift = yes same as above | Total cost 50 | Total cost 50 | yes |
| 3 | Name = me Age = 5  Toy = block Balloon = no  Card = no  Othergift = no | Name = me Age = 5  Toy = block Balloon = no  Card = no  Othergift = n | Total cost 15 | Total cost 15 | yes |
| 4 | Name = me Age = 5  Toy = block Balloon = no  Card = yes  Othergift = no | Name = me Age = 5  Toy = block Balloon = no  Card = yes  Othergift = no | Total cost 17.95 | Total cost 17.95 | yes |
| 5 | Name = me Age = 5  Toy = block Balloon = yes  Card = no  Othergift = no | Name = me Age = 5  Toy = block Balloon = yes  Card = no  Othergift = no | Total cost 21 | Total cost 21 | yes |
| 6 | Name = me Age = 5  Toy = block Balloon = yes  Card = yes  Othergift = no | Name = me Age = 5  Toy = block Balloon = yes  Card = yes  Othergift = no | Total cost 23.95 | Total cost 23.95 | yes |
| 7 | Name = me Age = 5  Toy = block Balloon = yes  Card = yes  Othergift = yes same inputs | Name = me Age = 5  Toy = block Balloon = yes  Card = yes  Othergift = yes same inputs | Total cost 47.90 | Total cost 47.90 | Total cost 47.90 |

After doing this project what I learned is the power of loops and how to effectively use them within the code. Different loops had different purposes and allowed for me not to have to repeat code. The only real tricky part was making sure I keep the loops in order and not have a place where an infinite loop was made.