

Milestone 2

PRG181





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## IPO TABLE:

For reference

|  |  |  |
| --- | --- | --- |
| Input | Processes | Output |
| Name of collectable  Owner’s detail  Category  Sub-category  Expected price | Sorting the data  Managing stock  Calculations of rent  Calculations of commission | Item & owner's details  Rent  Commission  Inventory report.  Transaction report |

## Flowchart:

# A diagram of a diagram Description automatically generated with medium confidence

# Pseudocode:

BEGIN

//We begin by creating the categories and sub-categories of the collectables

Create categories: Superhero Collectables, Anime/Manga Collectables, Gaming Collectables, Sold.

Under category Superhero Collectables create sub-categories:

Comic books and graphic novels, Limited edition artwork, Action figures and statues, Prop replicas and costumes

Under category Anime/Manga Collectables create sub-categories:

Wall scrolls and posters, Manga volumes, Anime DVDs and Blu-rays, Figurines and model kits

Under category Gaming Collectables create sub-categories

Art books and strategy guides, Special edition video games, Collectible cards and board games, Gaming consoles & peripherals

//We set the constant values of the rent of all the sub-categories

Set Rent for comic books and graphic novels = R10

Set Rent for limited edition artwork =R20

Set Rent for action figures and statues = R45

Set Rent for Prop replicas and costumes = R75

Set Rent for wall scrolls and posters = R5

Set Rent for manga volumes = R15

Set Rent for anime DVD's and Blue-rays = R25

Set Rent for figurines and model kits = R45

Set Rent for art books and strategy = R15

Set Rent for special edition video games = R30

Set Rent for collectible cards and board games = R45

Set Rent for gaming consoles and peripherals = R65

//This is the information entered when a new collectable is placed in the store

Input Name of collectable

Input Detail owner

Input Category

Input Sub-category

Input Expected price

//The system then uses the following code to sort data into the correct category and sub-category. First the system finds the correct category and then it searches for the correct sub-category, when the system finds the correct category and sub-category it stores the input data.

If category == Superhero Collectables THEN

For sub-categories in Superhero Collectables

If sub-category == Comic books and graphic novels THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

ELSE IF sub-category == Limited edition artwork THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Action figures and statues THEN

Store Name of collectable, Details of owner and Expected prices item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Prop replicas and costumes THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

END IF

END FOR

ELSE If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

ELSE IF sub-category == Manga volumes THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Figurines and modal kits THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

END IF

END FOR

ELSE If category == Gaming Collections THEN

For sub-categories in Gaming Collections

If sub-category == Art books and strategy guides THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

ELSE IF sub-category == Special edition video games THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Collectible cards and board games THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ￼

ELSE IF sub-category == Gaming consoles & peripherals THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

END IF

END FOR

//If stock sells

Input item code

IF item code == item code in database THEN

Dispaly item detail

Input if item is sold

IF item == sold THEN

Mark item as sold

Move item details to Sold category

END IF

ELSE

Display "Item code does not match any item in database."

END IF

// We need to calculate the commission of each category

input item price

commission=0.25

commission = item price\*0.25

superhero collectable price=input price

manga collectable price=input price

gaming collectable price=input price

commission superhero = superhero collectable price \* 0.25

Display “the commission for the superhero collectable is:”

commission manga= manga collectable price \* 0.25

Display “the commission for the manga collectable is:”

commission gaming= gaming collectable price \* 0.25

Display “the commission for the gaming collectable is:”

//This checks if the item is in the store at the end of each day and adds a day’s rent if the item is still in the store.

FOR days in store

IF item != sold THEN

Days in store += 1

END IF

//This code checks if the collectable is in the store for 6 months (182 days) and if so, it calculates the rent.

IF collectable is instore == 182 days THEN

If category == Superhero Collectables THEN

For sub-categories in Superhero Collectables

If sub-category == Comic books and graphic novels, THEN

Item rent = 182 \* Rent for comic books and graphic novels

Display item rent

ELSE IF sub-category == Limited edition artwork THEN

Item rent = 182 \* Rent for limited edition artwork

Display item rent

ELSE IF sub-category == Action figures and statues THEN

Item rent = 182 \* Rent for action figures and statues

Display item rent

ELSE IF sub-category == Prop replicas and costumes THEN

Item rent = 182 \* Rent for prop replicas and costumes

Display item rent

END IF

END FOR

Else If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Item rent = 182 \* Rent for wall scrolls and posters

Display item rent

ELSE IF sub-category == Manga volumes THEN

Item rent = 182 \* Rent for manga volumes

Display item rent

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Item rent = 182 \* Rent for anime DVD's and Blue-rays

Display item rent

ELSE IF sub-category == Figurines and modal kits THEN

Item rent = 182 \* Rent for figurines and modal kits

Display item rent

END IF

END FOR

ELSE If category == in Gaming Collections THEN

For sub-categories in Gaming Collections

If sub-category == Art books and strategy guides THEN

Item rent = 182 \* Rent for art books and strategy guides

Display item rent

ELSE IF sub-category == Special edition video games THEN

Item rent = 182 \* Rent for special edition video games

Display item rent

ELSE IF sub-category == Collectible cards and board games THEN

Item rent = 182 \* Rent for collectible cards and board games

Display item rent

ELSE IF sub-category == Gaming consoles & peripherals THEN

Item rent = 182 \* Rent for gaming consoles & peripherals

Display item rent

END IF

END FOR

END IF

//This code calculates the rent if the item is sold before the end of the 6 months lease period.

IF item == sold THEN

If category == Superhero Collectables THEN

For sub-categories in Superhero Collectables

If sub-category == Comic books and graphic novels THEN

Item rent = Days in store \* Rent for comic books and graphic novels

Display item rent

ELSE IF sub-category == Limited edition artwork THEN

Item rent = Days in store \* Rent for limited edition artwork

Display item rent

ELSE IF sub-category == Action figures and statues THEN

Item rent = Days in store \* Rent for action figures and statues

Display item rent

ELSE IF sub-category == Prop replicas and costumes THEN

Item rent = Days in store \* Rent for prop replicas and costumes

Display item rent

END IF

END FOR

Else If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Item rent = Days in store \* Rent for wall scrolls and posters

Display item rent

ELSE IF sub-category == Manga volumes THEN

Item rent = Days in store \* Rent for manga volumes

Display item rent

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Item rent = Days in store \* Rent for anime DVD's and Blue-rays

Display item rent

ELSE IF sub-category == Figurines and modal kits THEN

Item rent = Days in store \* Rent for figurines and modal kits

Display item rent

END IF

END FOR

ELSE If category == in Gaming Collections THEN

For sub-categories in in Gaming Collections

If sub-category == Art books and strategy guides THEN

Item rent = Days in store \* Rent for art books and strategy guides

Display item rent

ELSE IF sub-category == Special edition video games THEN

Item rent = Days in store \* Rent for special edition video games

Display item rent

ELSE IF sub-category == Collectible cards and board games THEN

Item rent = Days in store \* Rent for collectible cards and board games

Display item rent

ELSE IF sub-category == Gaming consoles & peripherals THEN

Item rent = Days in store \* Rent for gaming consoles & peripherals

Display item rent

END IF

END FOR

END IF

END