

# Real-World Problem Statements

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## Problem 1: Adding Multiple Pen Types

Write a program that allows the user to input and store data for 3 different pens and display their writing capabilities.

### Sample Input:

```
Brand: Pilot  
Color: Black  
Price: 15.50  
Type: gel
```

### Sample Output:

```
Pilot pen writes in Black ink.  
This pen can't be refilled.
```

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## Problem 2: Manage Multiple Pencils

Write a program to input data for 2 pencils and display their hardness and sharpening capability.

### Sample Input:

```
Brand: Staedtler  
Hardness: 2B  
Price: 3.00
```

### Sample Output:

```
Staedtler pencil writes with 2B lead.  
The pencil has been sharpened.
```

## Problem 3: Pen Refill Status Check

Create a program to check if a pen is refillable. Accept the type of pen as input and print whether it can be refilled.

### Sample Input:

```
Pen Type: gel
```

### Sample Output:

```
This pen can't be refilled.
```

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## Problem 4: Pencil Price Comparison

Write a program to compare the prices of two pencils and display the more expensive one.

### Sample Input:

```
Pencil 1 Price: 2.50  
Pencil 2 Price: 3.75
```

### Sample Output:

```
Pencil 2 is more expensive.
```

## Problem 5: Write with Multiple Pens

Write a program to input data for 2 pens and display the message when writing with each.

### Sample Input:

```
Pen 1 Brand: Lamy  
Pen 1 Color: Red  
Pen 2 Brand: Cross  
Pen 2 Color: Blue
```

### Sample Output:

```
Lamy pen writes in Red ink.  
Cross pen writes in Blue ink.
```

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## Problem 6: Sharpen Multiple Pencils

Create a program where a user sharpens three different pencils and displays sharpening status.

### Sample Input:

```
Brand: Apsara  
Hardness: 2H
```

### Sample Output:

```
Apsara pencil writes with 2H lead.  
The pencil has been sharpened.
```

## Problem 7: Stationery Price Calculator

Write a program that calculates the total price of a pen and a pencil.

### Sample Input:

```
Pen Price: 12.00  
Pencil Price: 4.50
```

### Sample Output:

```
Total Price: 16.50
```

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## Problem 8: Brand Name Validation

Create a program to check whether the brand name for a pen or pencil is not empty and display an error message if it is.

### Sample Input:

```
Pen Brand:
```

### Sample Output:

```
Error: Brand name cannot be empty.
```

## Problem 9: Display Stationery Details

Create a program to display all the details (brand, color, price) for both a pen and a pencil.

### Sample Input:

```
Pen Brand: Parker  
Color: Black  
Pencil Brand: Camlin  
Hardness: HB
```

### Sample Output:

```
Pen: Parker, Black, $10.99  
Pencil: Camlin, HB, $2.50
```

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## Problem 10: Cheapest Stationery Finder

Write a program to determine whether the pen or pencil is cheaper.

### Sample Input:

```
Pen Price: 10.99  
Pencil Price: 2.50
```

### Sample Output:

```
The pencil is cheaper.
```