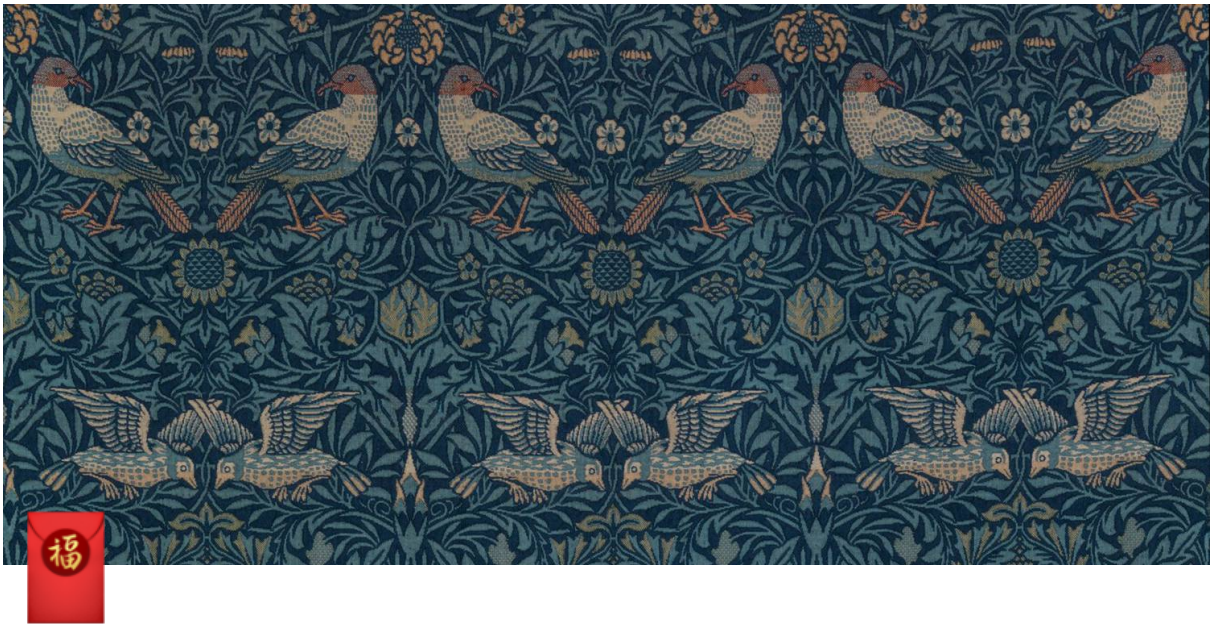

Day 3: Arithmetic Operator

1. Write a program to:

Calculate the Total Cost of Items

Description:
Ask the user for the price per item and the quantity of items they want to purchase. Display the total cost of the items.

Example Output:

```
Enter the price per item: 12.50
Enter the quantity: 4
The total cost for 4 items at $12.50 each is $50.00
```

---

2. Write a program to:

Find the Difference Between Two Numbers

Description:
Ask the user for two numbers and display the difference between them.

Example Output:

```
Enter the first number: 15.75
Enter the second number: 7.30
The difference between 15.75 and 7.30 is 8.45.
```

---

3. Write a program to:

Multiply Two Numbers

Description:
Ask the user for two numbers and display the product of those numbers.

Example Output:

```
Enter the first number: 8
Enter the second number: 6
The product of 8 and 6 is 48.
```

---

4. Write a program to:

Divide Two Numbers

Description:
Ask the user for two numbers and display the quotient of the division of the first number by the second. Handle division by zero gracefully.

Example Output:

```
Enter the dividend: 20
Enter the divisor: 4
The quotient of 20 divided by 4 is 5.0.
```

Example with Division by Zero:

```
Enter the dividend: 20
Enter the divisor: 0
Error: Division by zero is not allowed.
```

---

5. Write a program to:

Find the Remainder of Division

Description:
Ask the user for two numbers and display the remainder when the first number is divided by the second.

Example Output:

```
Enter the dividend: 17
Enter the divisor: 5
The remainder when 17 is divided by 5 is 2.
```

---

6. Write a program to:

Calculate the Average of Three Numbers

Description:
Ask the user for three numbers and display their average.

Example Output:

```
Enter the first number: 10
Enter the second number: 15
Enter the third number: 20
The average of 10, 15, and 20 is 15.00
```

---

7. Write a program to:

Calculate the Square of a Number

Description:
Ask the user for a number and display its square.

Example Output:

```
Enter a number: 9
The square of 9 is 81.
```

---

8. Write a program to:

Calculate the Sum of Squares of Two Numbers

Description:
Ask the user for two numbers and display the sum of their squares.

Example Output:

```
Enter the first number: 3
Enter the second number: 4
The sum of squares of 3 and 4 is 25.
```

---

9. Write a program to:

Convert Hours to Seconds

Description:
Ask the user for the number of hours and convert this into seconds. Display the result.

Example Output:

```
Enter the number of hours: 2
2 hours is equal to 7200 seconds.
```

---

10. Write a program to:

Compute the Modulo Operation

Description:
Ask the user for two numbers and compute the remainder when the first number is divided by the second.

Example Output:

```
Enter the dividend: 29
Enter the divisor: 4
The remainder when 29 is divided by 4 is 1.
```