

1. Function that checks if a given number is positive, negative, or zero.

3 pruebas:

Escenario	Valor	Resultado
Número Positivo	10	“Positivo”
Número Negativo	-8	“Negativo”
Número Cero	0	“Cero”

2. Function that validates user passwords.

The password validation rules are as follows:

The password must be at least 8 characters long.

The password must contain at least one uppercase letter,
one lowercase letter, one digit,
and one special character (!, @, #, \$, %, or &).

Escenario	Valor	Resultado
Valid Password	Holamundo123!	“ Valida ”
Longitud insuficiente	Hola12!	“ Longitud Insuficiente ”
No Mayus	hola123!	“ Falta Mayuscula ”
No Lowercase	HOLA123!	“ Falta Minuscula ”
No Digit	HolaMundo!!	“ Falta Dígito ”
No Special Character	HolaMundo123	“ Falta Carácter Especial ”

3. Function that calculates the discount for a customer's purchase based on the total amount.

The discount rules are as follows:

If the total amount is less than 100, no discount is applied.

If the total amount is between 100 and 500 (inclusive), a 10% discount is applied.

If the total amount is greater than 500, a 20% discount is applied.

Escenario	Valor	Resultado
Less than 100	98	" No discount "
Between 100 & 500	390	" 10% Discount "
More than 500	501	" 20% Discount "

4. Function that processes user orders in an e-commerce system.

The function calculates the total price of the items in the order, applying different discounts based on the quantity of each item.

The discount rules are as follows:

If the quantity of a single item is between 1 and 5 (inclusive), no discount is applied.

If the quantity of a single item is between 6 and 10 (inclusive), a 5% discount is applied.

If the quantity of a single item is greater than 10, a 10% discount is applied.

Escenario	Valor	Resultado
Between 1 & 5	4 items	no discount
Between 6 & 10	6 items	5% discount
items > 10	25 items	10% discount

5. Function that calculates shipping costs for an online shopping system.

The function calculates shipping costs based on the total weight of the items in the order and the shipping method chosen by the customer.

The shipping cost rules are as follows:

For standard shipping:

If the total weight is less than or equal to 5 kg, the cost is \$10.

If the total weight is between 5 and 10 kg (inclusive), the cost is \$15.

If the total weight is greater than 10 kg, the cost is \$20.

For express shipping:

If the total weight is less than or equal to 5 kg, the cost is \$20.

If the total weight is between 5 and 10 kg (inclusive), the cost is \$30.

If the total weight is greater than 10 kg, the cost is \$40.

Standard Shipping

Escenario	Valor	Resultado
weight <= 5kg	5	\$10
between 5kg & 10kg	7	\$15
more than 10 kg	12	\$20

Express Shipping

weight <= 5kg	5	\$20
between 5kg & 10kg	8	\$30
more than 10 kg	15	\$40