

HEIGHT VERIFICATION SYSTEM IN AN EXTREME ATTRACTION

1. A system that validates the height of people entering an extreme attraction. The system asks the user for his or her height; if the user is over 160 cm, then the system says “you can enter the attraction”. If not, then the system says, “you are not the right height.”

- ° Select the correct options for the code to work:



```
int height = 160;// in centimeters
// Height of the user

if (height > [ ]) {
    System.out.println([ ]) );
}

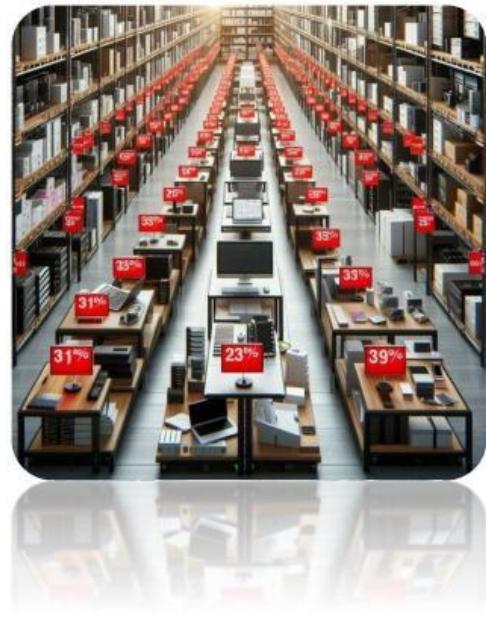
else if ([ ] <= 160) {
    System.out.println([ ]) );
}

[ ] {
    // if the user writes an invalid value
    System.out.println(" [ ] ");
}
```

DISCOUNTS AT THE STORE

2. Create a program that receives the value of a purchase (using Scanner for user input) and applies discounts according to the following conditions:
- If the purchase is greater than \$100,000, apply a 20% discount.
 - If the purchase is between \$50,000 and \$100,000, apply a 10% discount.
 - If the purchase is less than \$50,000, do not apply any discount.

Note: The program must show the final value of the purchase after applying the discount.



° Select the correct options for the code to work:

```
Scanner sc = new Scanner (System.in);
System.out.println("Enter the value of your purchase: ");
double purchase = sc.nextDouble();
double TheDiscount = 0;
// Apply discounts
if(purchase > 100000) {
    TheDiscount = purchase * 0.20; // get the percentage of the value
} else if (purchase >= 50000 && purchase <= 100000) {
    TheDiscount = purchase * 0.10; // get the percentage of the value
} else {
    TheDiscount = 0; // If less than 50,000 no discount is applied (discount = 0)
}

double total = purchase - TheDiscount;

// Mostrar el resultado
System.out.println("Final purchase value is: $" + total);
```