

Chapter - 4 - Make Code, with MakeCode
Month - August
Class - vi std

I Answer the following in short:

1. What is a variable in programming?

Ans: A variable is a named storage location used to store a value that can change during program execution.

2. What is the difference between a relational operator and an arithmetic operator?

Ans: A relational operator compares two values and gives a result such as true or false. An arithmetic operator is used to perform mathematical calculations such as Addition, Subtraction, Multiplication, Division.

3. What are logical operators?

Ans: Logical operators are used to combine or evaluate conditions. Examples: AND, OR, NOT.

II Long Answer Questions.

2. Explain the use of a conditional statement. How can it check if a number is even or odd?

Ans: A conditional statement is used in programming to make decisions. It checks whether a condition is true or false and then runs the correct block of code.

In MakeCode, conditional statements are usually written using if, elseif, and else blocks.

The main use of a conditional statement is that it allows the program to behave differently in different situations.

To check whether a number is even or odd we use the modulus operator ($\%$). The modulus operator gives the remainder when a number is divided by another number.

Eg: If a number is divided by 2 and the remainder is 0, then the number is even.

If the remainder is 1, then the number is odd.

III Competency Based Questions

1. If a phone battery displays 'Low Battery' when the charge is less than 15%, what operators are used here?

Ans: Relational operator ($<$ less than)

2. A delivery app checks if an order is eligible for free shipping, based on the amount. If it is over 1000rs, it qualifies, what programming concept is used here?

Ans: Conditional Statement.