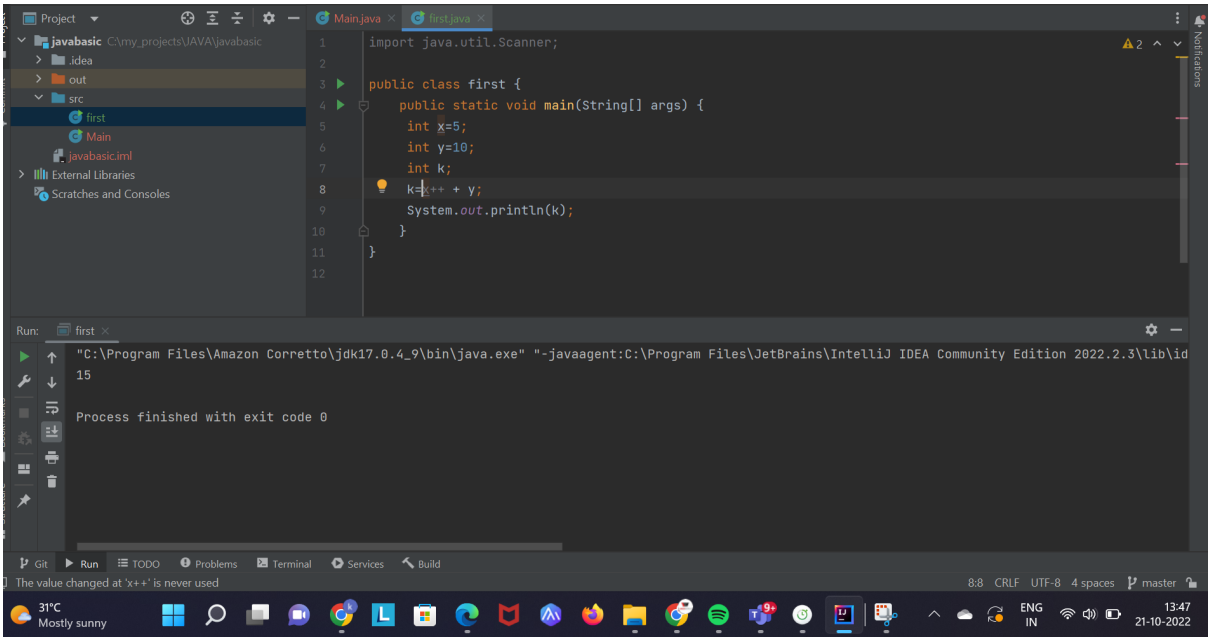
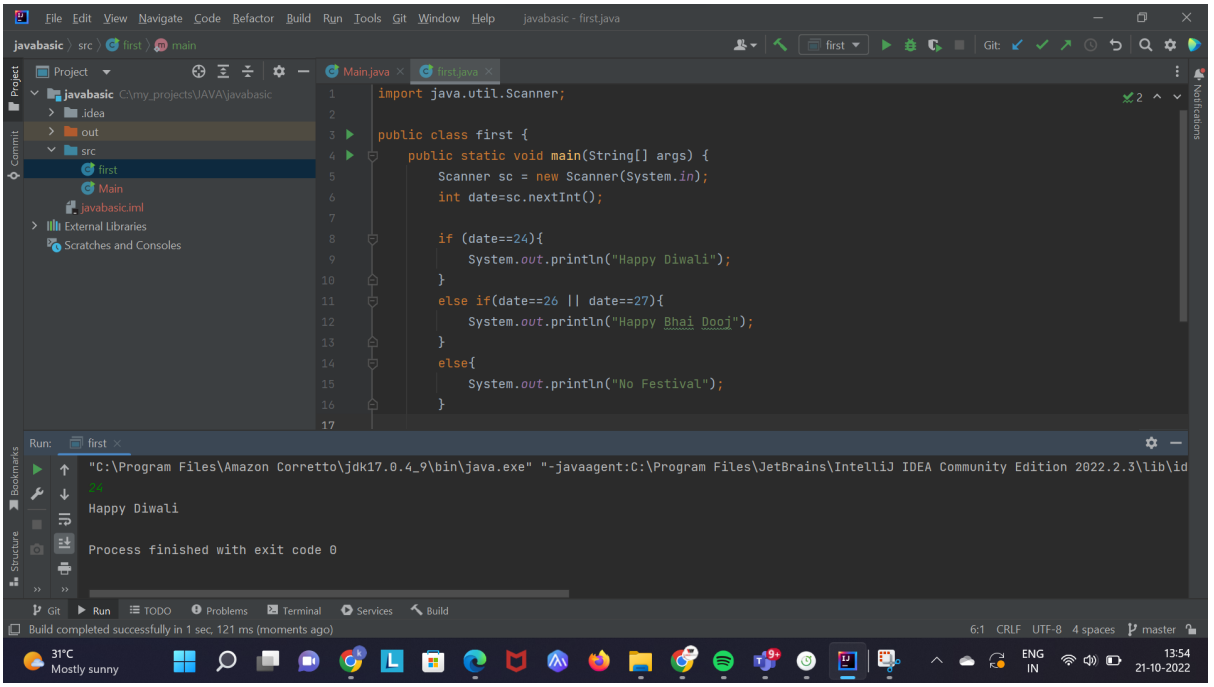
Summary JAVA

Sessions No 4(16-10-2022)

- Pre Increment operator - **++x** - here it first increments the value of **x** by 1 and then it will store back in the x variable and then use it.
- Post Increment operator - **x++** - here it will first use this x and after this will increment the value of x by 1 and then store it back to x
- Similar to ++x and x++ we also have - - x and x- - which will decrease the value of x by 1
- Now, when we have multiple operations in an expression, then we need to decide the priority of different operators. And the operator which has more priority will be executed first.
- 

  For example here priority of the **Post incitement Operator** is less than “**+**” so here first x+y will execute then “=” will execute(means z=5+10=15) and then in the last “**X++**” will execute and the value of x will increase by 1.

- An **if else** statement in programming is a conditional statement that runs a different set of statements depending on whether an expression is true or false. checkout below **Diwali program**



In this program, we are taking the input from the user, And then we are checking whether it is equal to "**24**" if this is true then statements inside "***if***" will execute otherwise it will again check whether the input is equal to **26 or 27** if it is true then the statements inside ***else if*** will execute otherwise finally it will execute the statement inside ***else***.

Input- 24
Output- Happy Diwali

Input - 26
Output - Happy BhaiDooj

Input -27
Output - Happy Bhai Dooj

Input - 28
Output - No Festival

- **Logical Operators** - Logical operators are used to check whether an expression is true or false. They are used in decision-making.

Operator	Example	Meaning
`&&` (Logical AND)	expression1 && expression2	`true` only if both `expression1` and `expression2` are `true`

`||` (Logical OR)	expression1 || expression2	`true` if either `expression1` or `expression2` is `true`
`!` (Logical NOT)	!expression	`true` if `expression` is `false` and vice versa

- Boolean is a datatype, It is used to store only two possible values, either true or false. It specifies 1-bit of the information in the RAM.
  ```
  boolean x=true;
  ```