**Java Key Points and Terms:**

* Types of Casting🡪 Widening Casting & Narrowing Casting
* Wide Casting changing the byte values lower to higher 🡪 byte🡪short🡪int🡪long🡪float🡪double
* Narrowing Casting changing the bytes into higher to lower🡪double🡪float🡪long🡪int🡪char🡪short🡪byte

Eg: int num=10;

Float b=a;

Sys(b);

b=10.0; and vise versa for the Narrowing also.

* To change one data type to another data type in primitive.
* **Operators**
* Arithmetic Operator +,-,\*,/,%
* Assignment Operator =,+=,-=,\*=,/=,%=
* Relational Operator ==,!=,>,<,>=,<= always gives boolean value.
* Logical operator &&,||, always gives Boolean value.
* Ternary Operator(Conditional Operator) ?: int a=25;b=35,c;c=a>b?a:b; a will assign to c if it is greatest
* Unary Operator Pre-increment,Post-Increment, pre-decrement,post-increment.
* Bitwise & Shift Operators &,|,XOR(^),NOT(~) do binary to decimal
* **Getting Input from User:**
* Scanner is a class for that to get input from the user.need to create the object.
* Int- sc.nextInt(),sc.nextLine()-word,sc.nextfloat(),nextdouble()
* **Command promp java.util.Scanner press enter**.
* **If Statemet,Else,Else if,Ladder if**
* **Switch Statement🡪** Switch(Expression)🡪 Case 1 or another number or Char & default;
* **Group Switch🡪**
* While getting the Char from the user we must use sc.next().charAt(0);
* **While loop**
* **Do While**
* **For loop**
* **Enhanced Forloop** for(int n : numbers)
* **Nested for**  for Patterns & Array
* **Break & Continue i==5 continue it is skip**
* **Array Ascending order take nested for and swap with temp**
* **Array insert value In middle**
* public static void main(String[] args) {
* int a[]={10,20,40,50,60,70,80};
* int index=2;
* int value=30;
* System.out.println(Arrays.toString(a));
* for (int i=a.length-1;i>index;i--)
* {
* a[i]=a[i-1];
* System.out.println(a[i]);
* }
* a[index]=value;
* System.out.println(Arrays.toString(a));
* **Duplicate values:**

**Use**

**If condition after comparing the first loop and second loop**

* **Jagged Array\_--> mixed matrix array use for each**
* **ASCII Value**
* **A-Z 65 -90**
* **a-z 97-122**
* **0-9 48-57**
* **Space 32**
* **Use for loop for to see those char**
* **String val has same value to define that use hascode()to explain it**
* **Use a.equals(b) or a.ignoreequals(b)**
* **To print with uppercase,lowercase,a.length,charAt(0),a.replace(“Joes”,”Stanley”)**
* **A.contains(“Joes”),a.isempty(),a.startswith(),a.endwith(“tut”),a.substring(0,5)char att[]= a.tochararray(); and use for each,a.trim()extra spaces ,a.split(“ ”) remove inbetween spaces**
* **Stringbuffer-> Stringbulder has same function() buffer.append,buffer.insert(10,”computer”)buffer.delete(9,11),buffer.reverse ,buffer.setcharAt(0,’F’).buffer.capacity(),**
* **String upper to lower using ASCII value convert by using int c=(int)a.charAt(i)-32;**
* **A.setcharAt(i,char(c));**