**Unicode Character in Java**

Unicode is a **universal character encoding standard** that represents almost all characters from different languages and symbols worldwide. In Java, characters are stored using **Unicode (UTF-16 encoding)**.

**Key Points:**

* Java uses **char** data type to store Unicode characters.
* Each char in Java takes **2 bytes (16 bits)** to support Unicode characters.
* Unicode characters are written as **\uXXXX**, where XXXX is a **hexadecimal code**.

**Example: Using Unicode in Java**

public class UnicodeExample {

public static void main(String[] args) {

char letterA = '\u0041'; // Unicode for 'A'

char smiley = '\u263A'; // Unicode for ☺ (Smiley)

System.out.println(letterA); // Output: A

System.out.println(smiley); // Output: ☺

}

}

**Common Unicode Examples**

| **Character** | **Unicode Code** | **Description** |
| --- | --- | --- |
| A | \u0041 | Latin Capital Letter A |
| a | \u0061 | Latin Small Letter a |
| ₹ | \u20B9 | Indian Rupee Symbol |
| ☺ | \u263A | Smiley Face |

**Why Unicode in Java?**

* Supports **multiple languages** (English, Hindi, Chinese, Arabic, etc.).
* Makes Java programs **internationalized**.
* Ensures **consistent character representation** across platforms.