**ASCII** stands for **American Standard Code for Information Interchange**. ASCII is a standard data-transmission code that is used by the computer for representing both the textual data and control characters.

**ASCII** is a 7-bit character set having 128 characters, i.e., from 0 to 127. ASCII represents a numeric value for each character, such as 65 is a value of **A.** In our Java program, we need to manipulate characters that are stored in ASCII.

In Java, an ASCII table is a table that defines ASCII values for each character. It is also a small subset of Unicode because it contains 2 bytes while ASCII requires only one byte.

|  |  |  |
| --- | --- | --- |
| **ASCII Value** | **Decimal Value** | **Hex value** |
| Control | 0 | 0 |
| Control | 1 | 1 |
| Control | 2 | 2 |
| Control | 3 | 3 |
| Control | 4 | 4 |
| Control | 5 | 5 |
| Control | 6 | 6 |
| Control | 7 | 7 |
| Control | 8 | 8 |
| \t | 9 | 9 |
| \n | 10 | A |
| Whitespace | 11 | B |
| \f | 12 | C |
| \r | 13 | D |
| Control | 14 | E |
| Control | 14 | F |
| Control | 16 | 10 |
| Control | 17 | 11 |
| Control | 18 | 12 |
| Control | 19 | 13 |
| Control | 20 | 14 |
| Control | 21 | 15 |
| Control | 22 | 16 |
| Control | 23 | 17 |
| Control | 24 | 18 |
| Control | 25 | 19 |
| Control | 26 | 1a |
| Control | 27 | 1b |
| Whitespace | 28 | 1c |
| Whitespace | 29 | 1d |
| Whitespace | 30 | 1e |
| Whitespace | 31 | 1f |
| space | 32 | 20 |
| **!** | 33 | 21 |
| **"** | 34 | 22 |
| # | 35 | 23 |
| $ | 36 | 24 |
| % | 37 | 25 |
| & | 38 | 26 |
| ' | 39 | 27 |
| ( | 40 | 28 |
| ) | 41 | 29 |
| \* | 42 | 2a |
| + | 43 | 2b |
| , | 44 | 2c |
| - | 45 | 2d |
| . | 46 | 2e |
| / | 47 | 2f |
| 0 | 48 | 30 |
| 1 | 49 | 31 |
| 2 | 50 | 32 |
| 3 | 51 | 33 |
| 4 | 52 | 34 |
| 5 | 53 | 35 |
| 6 | 54 | 36 |
| 7 | 55 | 37 |
| 8 | 56 | 38 |
| 9 | 57 | 39 |
| : | 58 | 3a |
| ; | 59 | 3b |
| < | 60 | 3c |
| = | 61 | 3d |
| > | 62 | 3e |
| ? | 63 | 3f |
| @ | 64 | 40 |
| A | 65 | 41 |
| B | 66 | 42 |
| C | 67 | 43 |
| D | 68 | 44 |
| E | 69 | 45 |
| F | 70 | 46 |
| G | 71 | 47 |
| H | 72 | 48 |
| I | 73 | 49 |
| J | 74 | 4a |
| K | 75 | 4b |
| L | 76 | 4c |
| M | 77 | 4d |
| N | 78 | 4e |
| O | 79 | 4f |
| P | 80 | 50 |
| Q | 81 | 51 |
| R | 82 | 52 |
| S | 83 | 53 |
| T | 84 | 54 |
| U | 85 | 55 |
| V | 86 | 56 |
| W | 87 | 57 |
| X | 88 | 58 |
| Y | 89 | 59 |
| Z | 90 | 5a |
| [ | 91 | 5b |
| \ | 92 | 5c |
| ] | 93 | 5d |
| ^ | 94 | 5e |
| \_ | 95 | 5f |
| ` | 96 | 60 |
| a | 97 | 61 |
| b | 98 | 62 |
| c | 99 | 63 |
| d | 100 | 64 |
| e | 101 | 65 |
| f | 102 | 66 |
| g | 103 | 67 |
| h | 104 | 68 |
| i | 105 | 69 |
| j | 106 | 6a |
| k | 107 | 6b |
| l | 108 | 6c |
| m | 109 | 6d |
| n | 110 | 6e |
| o | 111 | 6f |
| p | 112 | 70 |
| q | 113 | 71 |
| r | 114 | 72 |
| s | 115 | 73 |
| t | 116 | 74 |
| u | 117 | 75 |
| v | 118 | 76 |
| w | 119 | 77 |
| x | 120 | 78 |
| y | 121 | 79 |
| z | 122 | 7a |
| { | 123 | 7b |
| | | 124 | 7c |
| } | 125 | 7d |
| ~ | 126 | 7e |
| control | 127 | 7f |