# IS 145 – Website Technology
## Programming Project 9

Project Directions

This is an individual programming project.

For this assignment you will write an HTML program named specialchars.htm that uses JavaScript statements to output a table showing the HTML special character numbers 1-256 and their associated symbols. The HTML Character Entities are listed in Table A-2 on page HTML A5. Example output is shown on the next page. The project start file is named specialchars_txt.htm.

Grading

Executable files
- Create a folder named LastNameP9 (in zip format) that will contain the completed specialchars.htm program.
- Upload your zipped folder in the course Blackboard page content area in the assignment named Upload Completed P9 Folder. (It is necessary to do this so that the e-mail system does not block an HTML program attachment that includes JavaScript code).

40 points possible

Program Requirements

- Add a set of embedded styles for each td element that sets the font size to 11pt, the font family to Courier New and then monospace, horizontally centers the text, and vertically aligns the text to the top of the cell.
- The HTML table code must be output using JavaScript statements. HTML code that is output to the interpreter can use document.write statements.
- The table element should have an attribute that sets the border to 5. Output the tr element to start the header row. Then output a table header statement that spans 16 columns and displays the header HTML Special Characters. Close the header row.
- Use a JavaScript for statement to loop through the correct number of times to output each of the 16 cells per row. This loop will use an index variable named j.
- A counter variable named k can be used to store the special character number during the process of outputting the table.
- Use a JavaScript for statement to loop through the correct number of times to output the start and end tags for each of the 16 rows. This outer loop will use an index variable named i.
- At the beginning of each row in the table body you will determine whether it is an odd or even numbered row. This can be done using the % arithmetic operator and the loop variable as the condition in an if/else statement. If it is an odd numbered row in the table body then the row will begin with the tag `<tr bgcolor='pink'>`, otherwise it will just start with the normal `<tr>` tag.
- Each cell will show the special character number above the special character that displays.
- Table styles are included in the embedded style statements that are given.
- The JavaScript code required to output the table should only require about 15 lines of code.

Example Output

**HTML Special Characters**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | □ | □ | □ | □ | □ | □ | □ | | | | | | □ | □ | □ |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| ! | " | # | $ | % | & | ' | ( | ) | * | + | , | - | . | / | 0 |
| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | : | ; | < | = | > | ? | @ |
| 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 |
| Q | R | S | T | U | V | W | X | Y | Z | [ | \ | ] | ^ | _ | ` |
| 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 |
| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
| 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 |
| q | r | s | t | u | v | w | x | y | z | { | | | } | ~ | | € |
| 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 |
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| 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
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| Á | Â | Ã | Ä | Å | Æ | Ç | È | É | Ê | Ë | Ì | Í | Î | Ï | Ð |
| 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 |
| Ñ | Ò | Ó | Ô | Õ | Ö | × | Ø | Ù | Ú | Û | Ü | Ý | Þ | ß | à |
| 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| á | â | ã | ä | å | æ | ç | è | é | ê | ë | ì | í | î | ï | ð |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 |
| ñ | ò | ó | ô | õ | ö | ÷ | ø | ù | ú | û | ü | ý | þ | ÿ | Ā |