

JavaScript Lab Questions

For Loops

Folder Setup

- Create a folder called JavaScript_Revision on your desktop
- On Moodle, in Sem 2: Week 4 - Lab Questions, download the HTML template for these exercises:

Template.html

- All questions must go into a separate HTML file (use Template.html, remember to resave it for every question)
- **All JavaScript must be internal.**
- Apply an appropriate **internal style.**

IMPORTANT

- Remember that if your code is not working or doing what it is meant to do you must check for errors.
- Click anywhere in side your browser and press:

CTRL+SHIFT+J

- Remember: Do not to put spaces in your filenames

Question 1

- Rename Template.html as Q1.html
- The purpose of this question is to prompt the user to enter a start and end position (numerical values).
- These values are fed into a for loop that checks to see how even and odd numbers there are between the start and end position.
- The results are printed out to the HTML
- Remember to check for invalid inputs and isNaN()
- Use the following page as a guide:

This page says:

Enter Start Position

-75

☐ Prevent this page from creating additional dialogs.

OK

Cancel

This page says:

Enter End Position

252

☐ Prevent this page from creating additional dialogs.

OK

Cancel

Number Evaluator

Start Position: -75

End Position: 252

Even numbers between range: 164

Values Include:

-74 -72 -70 -68 -66 -64 -62 -60 -58 -56 -54 -52 -50 -48 -46 -44 -42 -40 -38 -36 -34 -32 -30 -28 -26 -24
-22 -20 -18 -16 -14 -12 -10 -8 -6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46
48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110
112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162
164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212
214 216 218 220 222 224 226 228 230 232 234 236 238 240 242 244 246 248 250 252

Odd numbers between range: 164

Values Include:

-75 -73 -71 -69 -67 -65 -63 -61 -59 -57 -55 -53 -51 -49 -47 -45 -43 -41 -39 -37 -35 -33 -31 -29 -27 -25 -23
-21 -19 -17 -15 -13 -11 -9 -7 -5 -3 -1 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51
53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 101 103 105 107 109 111 113 115
117 119 121 123 125 127 129 131 133 135 137 139 141 143 145 147 149 151 153 155 157 159 161 163 165 167
169 171 173 175 177 179 181 183 185 187 189 191 193 195 197 199 201 203 205 207 209 211 213 215 217 219
221 223 225 227 229 231 233 235 237 239 241 243 245 247 249 251

Refersh the page and try again

Question 2

- Once you have the previous questions completed resave it as Q2.html
- We will further enhance this code to add the following functionality
 - Calculate the sum for all the even numbers
 - Calculate the sum for all the odd numbers
 - Calculate the average for all the even numbers
 - Calculate the average for all the odd numbers
- Use the screenshot on the following page as a guide.

Number Evaluator

Start Position: -75

End Position: 252

Even numbers between range: 164

Values Include:

-74 -72 -70 -68 -66 -64 -62 -60 -58 -56 -54 -52 -50 -48 -46 -44 -42 -40 -38 -36 -34 -32 -30 -28 -26 -24 -22 -20 -18 -16 -14 -12 -10 -8 -6 -4 -2 0 2 4 6
8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100
102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174
176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212 214 216 218 220 222 224 226 228 230 232 234 236 238 240 242 244
246 248 250 252

Sum = 14596

Average = 89.00

Odd numbers between range: 164

Values Include:

-75 -73 -71 -69 -67 -65 -63 -61 -59 -57 -55 -53 -51 -49 -47 -45 -43 -41 -39 -37 -35 -33 -31 -29 -27 -25 -23 -21 -19 -17 -15 -13 -11 -9 -7 -5 -3 -1 1 3 5 7
9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 101 103
105 107 109 111 113 115 117 119 121 123 125 127 129 131 133 135 137 139 141 143 145 147 149 151 153 155 157 159 161 163 165 167 169 171 173 175 177
179 181 183 185 187 189 191 193 195 197 199 201 203 205 207 209 211 213 215 217 219 221 223 225 227 229 231 233 235 237 239 241 243 245 247
249 251

Sum = 14432

Average = 88.00

Refersh the page and try again

- Once you have Question 2 completed resave it as Q3.html
- In this part we are going to introduce some error checking.
- We want to make sure that the smallest value entered by the user goes in as the start and the largest number goes in as the end.
 - User prompted for start - Enters 55
 - User prompted for end - Enters -125
 - These have to be swapped using a temp variable

```
var temp=0;  
if(end<start){  
    temp = start;  
    start = end;  
    end = temp;  
}
```