

LEVEL II – JS: JavaScript Basics - Problems on Functions/Conditional/Looping Statements Working with loops and conditional statements:

1. Write a loop which prompts for a number greater than 100. If the visitor enters another number – ask them to input again. The loop must ask for a number until either the visitor enters a number greater than 100 or cancels the input/enters an empty line. Here we can assume that the visitor only inputs numbers. There's no need to implement a special handling for a non-numeric input in this task.

```
var a = prompt("User please enter the number greater than 100 ");
myfunction(a);

function myfunction(b) {
    if (a == '' || a == null) {
        return alert("No number entered exiting");
    } else if (a < 100) {
        prompt("Number less than 100 please enter again");
        if (a < 100) {
            console.log("Your Entered number is again less than 100 again so printing :", a);
        }
    } else {
        console.log("Your Entered number is :", a);
    }
}
```

2. Using if..else, write the code which gets a number via prompt and then shows in alert: 1, if the value is greater than zero, -1, if less than zero, 0, if equals zero. In this task we assume that the input is always a number

```
var a = prompt("User please enter the number");
myfunction(a);

function myfunction() {
    if (a > 0) {
        alert(1);
    } else if (a < 0) {
        alert(-1);
    } else if (a == 0) {
        alert(0);
    }
}
```

```
}
```

3. Write a function min(a,b) which returns the least of two numbers a and b. For instance: min(2, 5) == 2
min(3, -1) == -1 min(1, 1) == 1

```
let a = Number(prompt("Enter number1"));
let b = Number(prompt("Enter number2"));

min(a, b);

function min(a, b) {
    if (a < b) {
        alert(a);
    } else {
        alert(b);
    }
}
```

4. Write the code using if..else which would correspond to the following switch: switch (browser) { case 'Edge': alert("You've got the Edge!"); break; case 'Chrome': case 'Firefox': case 'Safari': case 'Opera': alert('Okay we support these browsers too'); break; default: alert('We hope that this page looks ok!'); }

```
if(browser == 'Edge') {
    alert("You've got the Edge!");
} else if (browser == 'Chrome'
|| browser == 'Firefox'
|| browser == 'Safari'
|| browser == 'Opera') {
    alert('Okay we support these browsers too' );
} else {
    alert('We hope that this page looks ok!' );
}
```

5. Rewrite the code below using a single switch statement: let a = +prompt('a?', ''); if (a == 0) { alert(0); } if (a == 1) { alert(1); } if (a == 2 || a == 3) { alert('2,3'); }

```
let a = +prompt('a?', '');

switch (a) {
  case 0: alert( 0 );
    break;

  case 1: alert( 1 );
    break;

  case 2:
  case 3: alert( '2,3' );
    break;
}
```

6. Write a function min(a,b) which returns the least of two numbers a and b. For instance: min(2, 5) == 2 min(3, -1) == -1 min(1, 1) == 1

```
let a = Number(prompt("Enter number1"));
let b = Number(prompt("Enter number2"));

min(a, b);

function min(a, b) {
  if (a < b) {
    alert(a);
  } else {
    alert(b);
  }
}
```

7. Write a function `pow(x,n)` that returns `x` in power `n`. Or, in other words, multiplies `x` by itself `n` times and returns the result. $\text{pow}(3, 2) = 3 * 3 = 9$ $\text{pow}(3, 3) = 3 * 3 * 3 = 27$ $\text{pow}(1, 100) = 1 * 1 * \dots * 1 = 1$
Create a web-page that prompts for `x` and `n`, and then shows the result of `pow(x,n)`

```
let x = prompt("Enter x", '');
let n = prompt("Enter n", '');
function pow(x, n) {
    let final = x;
    for (let i = 1; i < n; i++) {
        final *= x;
    }
    return final;
}
if (n < 1) {
    alert(`Provide a positive(+) integer`);
} else {
    alert(pow(x, n));
}
```