Exercise #2 – JavaScript Activity

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Part 1

1. **Number -> Word**

```
> let number = 691
  //Check if number is number only
  if (isFinite(number) == true) {

    let s_number = number.toString();
    let s_ones = "";
    let s_tens = "";
    let s_hundred = "";
    let a_ones =
  ["Zero","One","Two","Three","Four","Five","Six","Seven","Eight","Nine"];
    let a_teens =
  ["Ten","Eleven","Twelve","Thirteen","Fourteen","Fifteen","Sixteen","Seve
  nteen","Eighteen","Nineteen"];
    let a_tens =
  ["","","Twenty","Thirty","Forty","Fifty","Sixty","Seventy","Eighty","Nin
  ety"];
    if (s_number.length == 1) {
        //For single digit
        s_ones = a_ones[s_number[1]];
        console.log(s_ones);
    }
    else if (s_number.length == 2) {
        //For double digit
        switch (s_number[0]) {
            case "1":
                //For 10s
                s_tens = a_teens[s_number[1]];
                console.log(s_tens);
                break;
            default:
                //For Others
                s_tens = a_tens[s_number[0]];
                s_ones = a_ones[s_number[1]];
                console.log(s_tens + " " + s_ones);
                break;
        }
    }
```

```
    else if (s_number.length == 3) {
        //For Triple digit
        s_hundred = a_ones[s_number[0]] + " Hundred";
        switch (s_number[1]) {
            case "1":
                //For 10s
                s_tens = a_teens[s_number[1]];
                console.log(s_hundred + " " + s_tens);
                break;
            default:
                //For Others
                s_tens = a_tens[s_number[1]];
                s_ones = a_ones[s_number[2]];
                console.log(s_hundred + " " + s_tens + " " + s_ones);
                break;
        }
    }
    else {
        console.log("Error - other character entered"); }
}
else {
    console.log("Error - other character entered"); }
```

```
Six Hundred Ninety One                                    VM2777:47
```

num - 1 - number to word -.txt

2. Inverted Right Triangle

```
> let height = 20;
  let s_lineout = "";
  let s_times = height;
  let orig_height = height;
  let num_decrement = 0;
  //Checking if negative value or right character
  if (isFinite(height) == true && height > 0) {
      while (height != 0) {

          s_times = orig_height;
          num_decrement = orig_height - height;

          while (s_times != 0) {
              if (num_decrement >= s_times) {
                  s_lineout = "  " + s_lineout;
              }
              else {
              s_lineout = s_lineout + " *";
              }
              s_times--;
          }

          console.log(s_lineout);
          height--;
          s_lineout = "";

      }
  }
  else {
      console.log("Error - other character entered");
  }
```

```
 * * * * * * * * * * * * * * * * * * * *                    VM772:23
   * * * * * * * * * * * * * * * * * * *                    VM772:23
     * * * * * * * * * * * * * * * * * *                    VM772:23
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                 * * * * * * * * * * * *                    VM772:23
                   * * * * * * * * * * *                    VM772:23
                     * * * * * * * * * *                    VM772:23
```

```
* * * * * * * * *                    VM772:23
 * * * * * * * * *                   VM772:23
  * * * * * * * *                    VM772:23
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     * * * * *                       VM772:23
      * * * *                        VM772:23
       * * *                         VM772:23
        * *                          VM772:23
         *                           VM772:23
```

num - 2 - triangle -.txt

3. X - Shape

```
> let height = 5;
  let counter = 0;
  let lastnum = 0;
  let row = "";
  //Check if negative number and height is odd
  if (height > 0 && height % 2 !== 0 && isFinite(height) == true) {
      for (let i = 1; i <= height; i++){

          lastnum = height - counter;
          for (let j = 1; j <= height; j++){
              if (i==j) {
                  row = row + "*";
              }
              else if (j==lastnum) {
                  row = row + "*";
              }
              else {
                  row = row + " ";
              }
          }
          console.log(row);
          row = "";
          counter++;
      }
  }
  else {
      console.log("Error - Enter right values");
  }
  *   *                                                    VM265:21
   * *                                                     VM265:21
    *                                                      VM265:21
   * *                                                     VM265:21
  *   *                                                    VM265:21
< 4
```

num - 3 - X -.txt

Part 2

1. **Perimeter – Triangle**

```
> function perimeter_triangle(a,b,c) {
      return a + b + c;
  }
< undefined
> let output = perimeter_triangle(1,4,5);
< undefined
> console.log(output);
  10                                                    VM987:1
```

part 2 - num 1 - triangle perimeter.tx

2. Color – Array

```
> let color = ["Blue ", "Green", "Red", "Orange", "Violet", "Indigo",
  "Yellow "];
  let o = ["th","st","nd","rd"];
  let output = "";
  let s_choice = " choice is ";
  let s_color = "";
  for (var i = 0; i < color.length; i++) {
      output = "";
      let num = i + 1;
      switch (i) {
          case 0:
              s_color = o[1];
              break;
          case 1:
              s_color = o[2];
              break;
          case 2:
              s_color = o[3];
              break;
          default:
              s_color = o[0];
              break;
      }
      output = num + s_color + s_choice + color[i];
      console.log(output);
  }
1st choice is Blue                                    VM1715:24
2nd choice is Green                                   VM1715:24
3rd choice is Red                                     VM1715:24
4th choice is Orange                                  VM1715:24
5th choice is Violet                                  VM1715:24
6th choice is Indigo                                  VM1715:24
7th choice is Yellow                                  VM1715:24
< undefined
```

part 2 - num 2 - color.txt

3. **Skill – Object**

```
> let record = [{
    "Name":"Gibo",
    "Age":16,
    "SkillSet" : [{
      "Skill":"SAP UI5"
    },{
      "Skill":"SAP HANA"
    }]
  }, {
    "Name":"Patrick",
    "Age":22,
    "SkillSet" : [{
      "Skill":"SAP UI5"
    }, {
      "Skill":"SAP HANA"
    }, {
      "Skill":"SAP ABAP"
    }]
  }, {
    "Name":"MJ",
    "Age":24,
    "SkillSet" : [{
      "Skill":"SAP HANA"
    }]
  }];
  let n_highest_skill_ind = 0;
  let n_num_skills = 0;
  let n_prev_skills = 0;
  for (let i = 0; i < record.length; i++)
  {
      n_num_skills = record[i].SkillSet.length;
      //Compare number of Skills from previous
      if (n_num_skills > n_prev_skills)
          {
              n_highest_skill_ind = i;
              n_prev_skills = n_num_skills;
          }
  }
  console.log(record[n_highest_skill_ind].Name);
  console.log(record[n_highest_skill_ind].Age);
  Patrick                                                    VM2885:39
  22                                                         VM2885:40
```

part 2 - num 3 - skillset.txt