

Technical Task

Python/Java/NodeJs

- 1) Write a program to remove all numbers and replaces all special characters with a space from a string.

```
import re

def process_string(input_str):

    result_str = re.sub(r'\d', '', input_str)

    result_str = re.sub(r'[^\A-Za-z0-9 ]', ' ', result_str)

    return result_str

input_string = "Hello123! How are you?"

output_string = process_string(input_string)

print(output_string)
```

- 2) Write a program to convert all odd length string as, first half of the string to lowercase and second half of string to lowercase.

Actual string: transformed string

oriJenBeliret - ORIjENbeliret

orionmeo - orionmeo

- 3) Write a program to find second and fourth greatest number in an list of numbers (if length of list is less than 4, should give error message in response)

```
def find_second_and_fourth_greatest(numbers):
    if len(numbers) < 4:
        return "Error: List should have at least 4 numbers."

    sorted_numbers = sorted(set(numbers), reverse=True)
    print(sorted_numbers)

    second_greatest = sorted_numbers[1]
    fourth_greatest = sorted_numbers[3]

    return second_greatest, fourth_greatest
```

```
user_input = input("Enter a list of numbers separated by spaces: ")
number_list = [int(num) for num in user_input.split()]
```

```
result = find_second_and_fourth_greatest(number_list)
print(result)
```

HTML/CSS/Javascript :

- 4) Write a html page code with css, which can convert string date in certain format into given format using javascript.

For example:

Box: inputDate - 12/11/2012

Box: inputFormat - DD/MM/YYYY

Box: expectedFormat - MM/YYYY/DD

Output Button [on click]

the output should be - 11/2012/12 and displayed in a new Box

Also ensure that the entire page is precisely centered both horizontally and vertically on the web page. You can use any styles or color schemes of your choice.

```
<html>
```

```
<head>
```

```
<style>
```

```
  body {
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
    background-color: #f4f4f4;
  }

  .container {
    text-align: center;
    padding: 20px;
    border: 1px solid #ccc;
    border-radius: 8px;
    background-color: #fff;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
  }

  input {
    margin-bottom: 10px;
    padding: 8px;
  }

  button {
    padding: 10px;
    background-color: #af4c4c;
    color: #fff;
    border: none;
    border-radius: 4px;
    cursor: pointer;
```

```

    }

    #outputBox {
        margin-top: 20px;
        padding: 10px;
        border: 1px solid #ccc;
        border-radius: 4px;
    }
</style>
<title>Date Converter</title>
</head>
<body>

<div class="container">
    <label for="inputDate">Input Date:</label>
    <input type="text" id="inputDate" placeholder="Enter date (e.g.,
12/11/2012)">

    <label for="inputFormat">Input Format:</label>
    <input type="text" id="inputFormat" placeholder="Enter format (e.g.,
DD/MM/YYYY)">

    <label for="expectedFormat">Expected Format:</label>
    <input type="text" id="expectedFormat" placeholder="Enter format (e.g.,
MM/YYYY/DD)">

    <button onclick="convertDate()">Convert</button>

    <div id="outputBox"></div>
</div>

<script>
    function convertDate() {
        var inputDate = document.getElementById('inputDate').value;
        var inputFormat = document.getElementById('inputFormat').value;
        var expectedFormat = document.getElementById('expectedFormat').value;

        var formattedDate = formatDate(inputDate, inputFormat, expectedFormat);

        document.getElementById('outputBox').innerText = 'Formatted Date: ' +
formattedDate;
    }

    function formatDate(inputDate, inputFormat, expectedFormat) {

        var parts = inputDate.split('/');
        var formattedDate = expectedFormat
            .replace('DD', parts[0])
            .replace('MM', parts[1])
            .replace('YYYY', parts[2]);

        return formattedDate;
    }

```

```
</script>
```

```
</body>
```

```
</html>
```

5) Write a html/css/javascript code to create a frontend page, to show electronic device information.

The page will contain, multiple clickable text fields with name of devices (MobilePhone, Laptop, Desktop,...)

On click to any of the text, it opens a new tab/iframe to show description (any random details) of the selected device. Can use any react/angular/css to make the page look good visually.

Style.css:

```
body {  
    font-family: 'Arial', sans-serif;  
    background-color: #f4f4f4;  
    margin: 0;  
}  
  
center {  
    margin-top: 50px;  
}  
  
h1 {  
    color: #333;  
}  
  
a {  
    text-decoration: none;  
    color: #007BFF;  
}  
  
a:hover {  
    color: #0056b3;  
}  
  
p {  
    color: aqua;  
    line-height: 1.6;  
    margin-bottom: 20px;  
}
```

Electrons.html:

```
<html>  
<head>  
    <title>Electronics</title>  
    <link rel="stylesheet" href="styles.css">  
</head>  
<body>
```

```
<center>
  <h1>Electronics</h1>
  <a href="1.Mobile.html">1. Mobile</a><br>
  <a href="2.Laptop.html">2. Laptop</a><br>
  <a href="3.Desktop.html">3. Desktop</a><br>
  <a href="4.Iphone.html">4. iPhone</a><br>
  <a href="5.Tablet.html">5. Tablet</a><br>
</center>
</body>
</html>
```

1.Mobile.html

```
<html>

<head>

  <title>Device Description</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <p>.Mobile: Handheld device with a touchscreen interface, capable of making
calls, sending texts, and running various applications.</p>
</body>
</html>
```

2.Laptop.html

```
<html>

<head>

  <title>Device Description</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <p>.Laptop: Handheld device with a touchscreen interface, capable of making
calls, sending texts, and running various applications.</p>
</body>
</html>
```

3.Desktop.html

```
<html>

<head>

  <title>Device Description</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
```

```
    <p>.Desktop: Handheld device with a touchscreen interface, capable of
making calls, sending texts, and running various applications.</p>
</body>
</html>
```

4.Iphone.html

```
    <html>

<head>

    <title>Device Description</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <p>.Iphone: Handheld device with a touchscreen interface, capable of making
calls, sending texts, and running various applications.</p>
</body>
</html>
```

5.Tablet.html

```
    <html>

<head>

    <title>Device Description</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <p>.Tablet: Handheld device with a touchscreen interface, capable of making
calls, sending texts, and running various applications.</p>
</body>
</html>
```