Assignment 0

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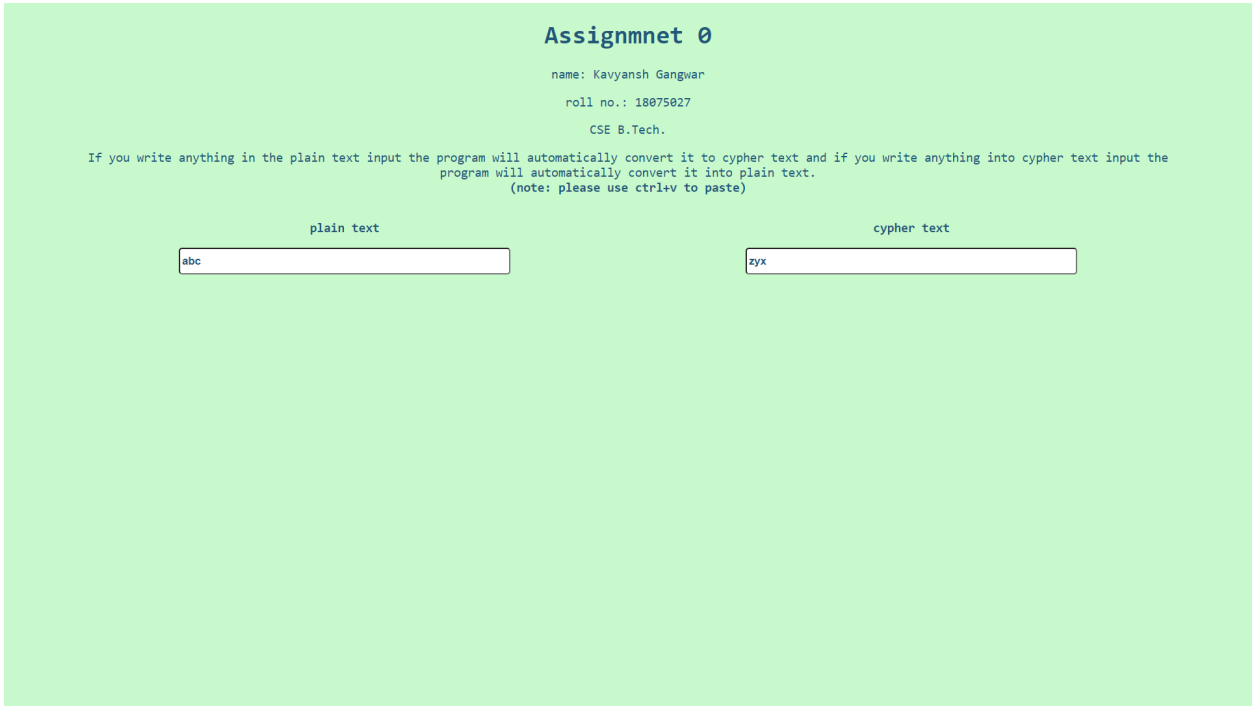
Screen Shots



Assignmnet 0

name: Kavyansh Gangwar

roll no.: 18075027

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If you write anything in the plain text input the program will automatically convert it to cypher text and if you write anything into cypher text input the program will automatically convert it into plain text.
(note: please use ctrl+v to paste)

plain text

hello world

cypher text

svool dliow

Source Code

assignment.html ->

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <!-- the title of the page -->
    <title>assignment</title>
    <!-- importing the stylesheet -->
    <link rel="stylesheet" href="assignment.css">
  </head>
  <body>
    <!-- a container for marign and center allign the text -->
    <div class="container center">
      <h1>Assignment 0</h1>
      <p>name: Kavyansh Gangwar</p>
      <p>roll no.: 18075027</p>
      <p>CSE B.Tech.</p>

      <!-- description of how the page works -->
      <p>If you write anything in the plain text input the program
will automatically convert it to cypher text and if you write anything
into cypher text input the program will automatically convert it into
plain text.
        <br><b>(note: please use ctrl+v to paste)</b></p>

      <div class="row">
        <!-- area plain text -->
        <div class="col">
          <p>plain text</p>
          <input type="text" id="cyphertext"name="" value=""
placeholder="plain text">
        </div>
        <!-- area for cypher text -->
        <div class="col">
          <p>cypher text</p>
```

```
          <input type="text" id="plaintext" name="" value=""
placeholder="cypher text">
        </div>
      </div>
    </div>

    <!-- importing javascript that implements the logic of encryption
-->
    <script src="assignment.js" charset="utf-8"></script>
  </body>
</html>
```

assignment.css ->

```
/*
this file contains the style properties of the html file
*/

/*
changes background color, font color, font size, font type for whole
page
*/
body{
  background-color: #C7F9CC;
  color: #22577A;
  font-family: monospace;
  font-size: 1.2em;
}

/* css style for input elements*/
input{
  height: 2em;
  width: 30em;
  border-radius: 0.3em;
  color: inherit;
  font-weight: bold;
}

/* css style for container class*/
.container{
  margin-left: 5em;
  margin-right: 5em;
  margin-top: auto;
  margin-bottom: auto;
}

/* css style for center class to allign the text center*/
.center{
  text-align: center;
}
```

```
/* css style for row class*/
.row{
  column-count: 2;
  column-gap: 2em;
  column-width: 40em;
  column-span: 40em;
}

/* css style for col class*/
.col{
  column-width: 40em;
  font-weight: bold;
}
```

assignment.js ->

```
// area from which i have to convert to cypher text
var cyphertext = document.getElementById('cyphertext');
// area from which i have to convert to plain text
var plaintext = document.getElementById('plaintext');
// cypher text variable
var cyStr = "";
// plain text variable
var plStr = "";
// function to convert cypher text to plain text
const cypherToPlain = function() {
  // take input of user
  cyStr = cyphertext.value;
  // intialize the palin text
  plStr = "";
  // for every character in input use the algo for conversion
  for(var i=0;i<cyStr.length;i++){
    // gets the ascii value of the character of string at index i
    var c = cyStr.charCodeAt(i);
    if(c>96 && c<123){
      c -= 97;
      c = 25-c;
      c+=97;
    }else if(c>64 && c<91){
      c -= 65;
      c = 25-c;
      c+=65;
    }
    // converts ascii value to character
    plStr+=String.fromCharCode(c);
  }
  // display the value obtained;
  plaintext.value = plStr;
}
// function to convert plain text to cypher text
const plainToCypher = function(){
  // take input of user
  plStr = plaintext.value;
```

```
  // intialize the cypher text
  cyStr = "";
  // for every character in input use the algo for conversion
  for(var i=0;i<plStr.length;i++){
    // gets the ascii value of the character of string at index i
    var c = plStr.charCodeAt(i);
    if(c>96 && c<123){
      c -= 97;
      c = 25-c;
      c+=97;
    }else if(c>64 && c<91){
      c -= 65;
      c = 25-c;
      c+=65;
    }
    // converts ascii value to character
    cyStr+=String.fromCharCode(c);
  }
  // display the value obtained;
  cyphertext.value = cyStr;
}

// adds an event listener to for conversion
cyphertext.addEventListener('keyup',cypherToPlain);

// adds an event listener to for conversion
plaintext.addEventListener('keyup',plainToCypher);
```

Github Link

The code can be found at
https://github.com/kavyanshgangwar/networksecurity-assignment0