Assignment 5

Q1.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>FizzBuzz</title>

</head>

<body>

<center>

<h1>

Create a for loop that iterates up to 100 while outputting "fizz" at multiples of 3, "buzz" at multiples of 5 and "fizzbuzz" at multiples of 3 and 5.

</h1>

</center>

<script defer src = "Q1.js">

</script>

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<mark>

<b>

To see the Output, press F12 on the keyboard.

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</mark>

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</html>

Q1.js

for(let i = 1; i <= 100; i++)

{

if(((i % 3) == 0) && ((i % 5) == 0))

{

console.log(`The value of i is ${i} : fizzbuzz`);

}

else if((i % 3) == 0)

{

console.log(`The value of i is ${i} : fizz`);

}

else if((i % 5) == 0)

{

console.log(`The value of i is ${i} : buzz`);

}

else

{

console.log(`The value of i is ${i}`)

}

}

Q2.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Destructure</title>

</head>

<body>

<center>

<h1>

Destructure

</h1>

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<script defer src = "Q2.js">

</script>

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To see the Output, press F12 on the keyboard.

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Q2.js

const student = {

name : "Helsinki",

age : 24,

projects : {

diceGame : "Two player dice game using JavaScript"

}

}

const {name, age, projects : {diceGame}} = student;

console.log(`name : ${name}`);

console.log(`age : ${age}`);

console.log(`projects : diceGame (${diceGame})`);

Q3.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Spread Operator</title>

</head>

<body>

<center>

<h1>

Spread Operator in Array

</h1>

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<script defer src = "Q3.js">

</script>

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Q3.js

let shoppingList = ["Tamato", "Banana", "Cucumber", "Sweet Corn", "Jaggery"];

let basket = [...shoppingList, "Oats", "Dates", "Milk", "Apple"];

console.log(`Initial Shopping list : ${shoppingList}`);

console.log(`Updated Shopping list : ${basket}`);

Q4.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Calculator</title>

</head>

<body>

<center>

<h1>

Calculator

</h1>

</center>

<script defer src = "Q4.js">

</script>

<center>

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To see the Output, press F12 on the keyboard.

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Q4.js

let option = parseInt(prompt("Please enter your choice of operation\n 1 : Addition\n 2 : Subtraction\n 3 : Multiplication\n 4 : Division\n 5 : Square Root\n 6 : Percentage\n 7 : Quit"));

if(Number.isNaN(option) || option == 7)

{

console.log("You have exited.");

}

else

{

let num1 = parseInt(prompt("Please enter the 1st number"));

let num2 = parseInt(prompt("Please enter the second number"));

if(Number.isNaN(num1) && Number.isNaN(num2))

{

console.log("You have exited.")

}

else

{

switch(option)

{

case 1 :

console.log(`The result of addition is ${num1 + num2}`);

break;

case 2 :

console.log(`The result of subtraction is ${num1 - num2}`);

break;

case 3 :

console.log(`The result of multiplication is ${num1 \* num2}`);

break;

case 4 :

if(num2 == 0)

{

console.log("Cannot divide a number by 0.")

}

else

{

console.log(`The result of addition is ${num1 / num2}`);

}

break;

case 5 :

console.log(`The square root is ${Math.sqrt(num1, num2)}`);

break;

case 6 :

console.log(`The percentage is ${num1 \* (num2 / 100)}`);

break;

default :

console.log("INVALID CHOICE");

}

}

}

Q5.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Commission Calculator</title>

</head>

<body>

<center>

<h1>

Commission Calculator

</h1>

</center>

<script defer src = "Q5.js">

</script>

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<mark>

<b>

To see the Output, press F12 on the keyboard.

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Q5.js

let sales = parseInt(prompt("Please enter the total sales mode by you"))

console.log(`Sales made by you : ${sales}`);

if(sales >= 0 && sales <= 5000)

{

console.log(`Commision earned by you is ${sales \* 0.02}`);

}

else if(sales >= 5001 && sales <= 10000)

{

console.log(`Commision earned by you is ${sales \* (0.05 + 0.02)}`);

}

else if(sales >= 10001 && sales <= 20000)

{

console.log(`Commision earned by you is ${sales \* (0.07 + 0.05 + 0.02)}`);

}

else if(sales > 20000)

{

console.log(`Commision earned by you is ${sales \* (0.1 + 0.07 + 0.05 + 0.02)}`);

}

else

{

console.log("INVALID INPUT");

}

Q6.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Number Checker</title>

</head>

<body>

<center>

<h1>

Number Checker

</h1>

</center>

<script defer src = "Q6.js">

</script>

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To see the Output, press F12 on the keyboard.

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Q6.js

let num;

do

{

num = parseInt(prompt("Please enter a number", 0));

console.log(`Enter Number : ${num}`);

}

while(num <= 100);

Q7.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Prime Number Generator</title>

</head>

<body>

<center>

<h1>

Prime Number Generator from 1 to n

</h1>

</center>

<script defer src = "Q7.js">

</script>

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To see the Output, press F12 on the keyboard.

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Q7.js

let num = parseInt(prompt("Please enter a number"));

let isPrime = function(num)

{

let prime = [];

if(num == 1)

{

prime.push(num);

}

else if(num == 2)

{

prime.push(1);

prime.push(num);

}

else if(num > 2)

{

for(let i = 2; i <= num; i++)

{

let checker = true; // Assume number is prime

for(let j = 2; j <= i-1; j++)

{

if((i % j) == 0)

{

checker = false;

}

}

if(checker)

{

prime.push(i);

}

else

{

checker = true;

}

}

}

return prime;

}

console.log(`For n = ${num}, the result will be ${isPrime(num)}`);

Q8.html

<!DOCTYPE html>

<html lang="en">

<head>

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<title>Arrow Function</title>

</head>

<body>

<center>

<h1>

Arrow Function

</h1>

</center>

<script defer src = "Q8.js">

</script>

<center>

<mark>

<b>

To see the Output, press F12 on the keyboard.

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Q8.js

let ask = (question, yes, no) => {

if(confirm(question))

{

yes();

}

else

{

no();

}

}

ask(

"Do you agree?",

() => {

alert("You agreed.");

},

() => {

alert("You cancelled the execution.");

}

);