① Write a function declaration named calculateSum that takes two numbers as parameters & return their sum

⇒

```
function calculateSum(a, b){
    let sum = a + b;
    return sum;
}
console.log(calculateSum(1, 2)); //3
```

② Create a function expression named concatStrings that takes two string parameters & return their concatenation.

```
const concatStrings = function(a, b){
    return a + b;
};
console.log(concatStrings("Welcome",
                          "Rudraprasad"));
// WelcomeRudraprasad
```

(3) Write a function to check no. is even or Odd

```
function isNum(a){
    if(a%2 == 0){
        console.log(`${a} is even`);
    }
    else{
        console.log(`${a} is odd`);
    }
}
isNum(6); // 6 is even
```

(4) Write a function to check number is PrimeNumber or Not

```
const primeNumber = function(num){
    let i;
    result = true;
    for(i=2; i<= num-1; i++){
        if(num % i == 0){
            result = false;
            break;
        }
    }
    if(result == true){
        console.log(num + " prime number");
    }
    else{
        console.log(num + " Not a primenumber");
    }
};
primeNumber(7); // 7 prime number
primeNumber(10); // 10 Not a primenumber
```

(5) Create a function expression named getDayName that takes a no. (1-7) as a parameter & return the corresponding day of the week @.

⇒
```
const getDayName = function (day) {
    if (day == 1) {
        return "Monday";
    } else if (day == 2) {
        return "Tuesday";
    } else if (day == 3) {
        return "Wednesday";
    } else if (day == 4) {
        return "Thursday";
    } else if (day == 5) {
        return "Friday";
    } else if (day == 6) {
        return "saturday";
    } else if (day == 7) {
        return "sunday";
    } else {
        return "Invalid Number";
    }
}
```

(6) Write an arrow function named max that takes two no. as parameters & returns the greater of the two using the ternary operator.

=> const max = (a, b) => {
let greaterNumber = a>b
? "a is greater than b"
: "b is greater than a";
return greaterNumber
};
console.log(max(10,5)); a is greater than b

(7) Write a function declaration named convertTemperature that takes a temperature value and a unit ('C' for Celsius, 'F' for Fahrenheit).
If the unit is 'C', convert the temp. to Fahrenheit, & if the unit is 'F', convert it to Celsius. Use if-else statements to handle the conversion.

=> const convertTemperature = (val, unit) => {
{ if (unit === "C") {
return (val * 9a) + 32;
} else if (unit === "F") {
return (val - 32) * 9S;
} else {
return "Invaid unit";
}
};

console.log (convertTemperature (20, "C")); // 1217
console.log (convertTemperature (72, "F")); // 3800

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(8) Write a function declaration named ~~calculate~~ calculateArea that takes two parameters: shape & dimension.
If the shape is "square", the dimension represents the side length & the function should return the area of the square. Use switch case to handle the different shapes.

```
function calculateArea (shape, dimension) {
    switch (shape) {
        case "circle":
        return 3.14 * dimension * 2;

        case "square":
        return dimension * dimension;

        default:
            return "Invalid shape";
    }
}

console.log(calculateArea ("circle", 10)); 62.800000
console.log(calculateArea ("square", 5)); 25
```

(9) Create a function expression named formatCurrency that takes two parameters: amount & currency. Return a string that formats the amount with the currency symbol.

```
const formatCurrency = function (amount, currency) {
    switch (currency) {
        case "rupes":
            return "₹" + amount;

        case "USD":
            return "$" + amount;

        default:
            return "Invalid currency";
    }
};
console.log (formatCurrency (20, "rupes")); // ₹20
console.log (formatCurrency (10, "USD")); // $10
```

(10) Write a function declaration named calculateBMI that takes two parameters: weight (in kg) & height (in M). The function should return the Body Mass Index (BMI) calculated using the formula:

```
function calculateBMI (weight, height) {
    return height * weight;
}
console.log (calculateBMI (20, 18)); // 360
```

(11)

```
const calculateCompoundInterest =
        function (principal, rate, time) {
    let result = principal * (1+rate) * time;
    return "compound Interest is " + result;
};

console.log (calculateCompoundInterest (8000, 0.5, 10));
                    // compound Interest
                    is 120000
```

(12)

```
const calculateTriangleArea = (base, height) => {
    let area = 1/2 * base * height;
    return area;
};
console.log (calculateTriangleArea (10, 20)); //4200
```

(13)

```
function simpleCalculator (num1, num2, operator) {
    switch (operator) {
        case "+":
            return num1 + num2;

        case "-":
            return num1 - num2;

        case "*":
            return num1 * num2;
```

```
        case "/":
            return num1 / num2;

        default:
            return "Invalid Input";
    }
}

console.log(simpleCalculator(2, 2, "+")); // 4
console.log(simpleCalculator(2, 2, "%")); // Invalid Input
```

(14)

```
const findLargest = function(num1, num2, num3) {
    if (num1 > num2 && num1 > num3) {
        return num1 + " is Greater than " + num2 + " and " + num3;
    } else if (num2 > num1 && num2 > num3) {
        return num2 + " is Greater than " + num2 + " and " + num3;
    } else {
        return num3 + " is Greater than " + num1 + " and " + num2;
    }
};

console.log(findLargest(68, 45, 2)); // 68 is Greater than 45 & 2
```

(13)

```
function largest(num1, num2, num3, num4) {
    if (num1 > num2 && num1 > num3 && num1 > num4) {
        return num1 + " is larger than " + num2 + ", " + num3 + " and " + num4;
    } else if (num2 > num1 && num2 > num3 && num2 > num4) {
        return num2 + " is larger than " + num2 + ", " + num3 + " and " + num4;
    } else if (num3 > num1 && num3 > num2 && num3 > num4) {
        return num3 + " is larger than " + num1 + ", " + num2 + " and " + num4;
    } else {
        return num4 + " is larger than " + num1 + ", " + num2 + " and " + num3;
    }
}

console.log(largest(8, 50, 48, 10));
// 50 is larger than 50, 48 and 10
```