Javascript assignment-2

Level:1:

1. Declare firstName, lastName, country, city, age, isMarried, and year variable and assign value to it and use the type of operator to check different data types.

```
var firstName="sowmya"
var lastName="somisetty"
var country="India"
var city="Kavali"
var age=23
var isMarried=false
var year=2024
console.log("Type of firstName:", typeof firstName);
console.log("Type of lastName:", typeof lastName);
console.log("Type of country:", typeof country);
console.log("Type of city:", typeof city);
console.log("Type of age:", typeof age);
console.log("Type of isMarried:", typeof isMarried);
console.log("Type of year:", typeof year);
```

2. Check if the type of '10' is equal to 10---------→ false

3. Check if parseInt('9.8') is equal to 10 ---------→ false

4. The boolean value is either true or false.

- **Write three JavaScript statements that provide truthy value.**

```
if (1) {

console.log("This is truthy.");
}
if ("Hello") {
console.log("This is truthy.");
}
if ([]) {
console.log("This is truthy.");
}
```

- **Write three JavaScript statements that provide falsy value**

```
if (0) {
console.log("This is falsy.");
}
if ("") {
console.log("This is falsy.");
}
if (null) {
console.log("This is falsy.");
}
```

5. Given the following declarations, what are the new values of each variable after the given statement?

● var x = 10; ● var y = 15; ● var z = 6; ● var a, b, c;

1. x += 2 * y; 2. y -= x / --z; 3.z += x-- + 5; 4.y /= z + 2; 5.x *= ++y - z--;

val of x: -1905.75

val of y: 1.1346153846153846

val of z: 49

6. Figure out the result of the following comparison

● 4 > 3 ----------→true

4 >= 3 ----------→ true

4 < 3 ---------- > false

4 <= 3 ----------→false

4 == 4 ----------→true

4 === 4 ----------→true

4 != 4 ----------→false

4 !== 4 ----------→false

4 != '4' ----------→false

● 4 == '4' -----→true

4 === '4' ---------→false

7. Figure out the result of the following expressions

❖ 4 > 3 && 10 < 12 ……..>true

❖ 4 > 3 && 10 > 12 --------→false

❖ 4 > 3 || 10 < 12 ---------→true

❖ 4 > 3 || 10 > 12 --------→true

❖ !(4 > 3) --------→fasle

❖ !(4 < 3) -------→true

❖ !(false) ---------→true

- !(4 > 3 && 10 < 12) ----------→false
- !(4 > 3 && 10 > 12) ----------→true
- !(4 === '4') ----------→true

Level-2:

```
let base=parseFloat(prompt("enter base of triangle:"))
let height=parseFloat(prompt("enter height of triangle:"))
let area=0.5*base*height
console.log("area of triangle:",area)

let side=parseFloat(prompt("Enter side of triangle:"))
let perimeter=side*side*side
console.log("perimeter of the Triangle:",perimeter)

let len=parseFloat(prompt("Enter length of the rectangle:"))
let wid=parseFloat(prompt("Enter width of the rectangle:"))
let area=len*wid
let perimeter=2*(len+wid)
console.log("Area of the Rectangle:",area)
console.log("Perimeter of the Rectangle:",perimeter)

let radius=parseFloat(prompt("Enter radius of circle:"))
let area=3.14*radius*radius
let circumference=2*3.14*radius
console.log("Area of the circle:",area)
console.log("Circumference of the circle:",circumference)


var slope=2
var y_intercept=-2
var x_intercept=-(-2/2)
console.log("slope:"+slope)
console.log("y-intercept:"+y_intercept)
console.log("x-intercept:"+x_intercept)

let no_of_hrs_to_work=parseInt(prompt("Enter No.of hours to work:"))
let rate_per_hr=parseFloat(prompt("Enter Rate per hour:"))
let pay_per_person=no_of_hrs_to_work * rate_per_hr
console.log("Pay per person="+pay_per_person)

let a=parseFloat(prompt("Enter A value:"))
let b=parseFloat(prompt("Enter B value:"))
console.log("Sum of 2 numbers:"+(a+b))

let a=parseFloat(prompt("Enter A value:"))
let b=parseFloat(prompt("Enter B value:"))
console.log("Division of 2 numbers:"+(a/b))

let a=parseFloat(prompt("Enter 1st value:"))
let b=parseFloat(prompt("Enter 2nd value:"))
let c=parseFloat(prompt("Enter 3rd value:"))
let d=parseFloat(prompt("Enter 4th value:"))
let e=parseFloat(prompt("Enter 5th value:"))
console.log("Average of 5 values:"+(a+b+c+d+e)/5)

let seconds=parseInt(prompt("Enter seconds:"))
let hours=seconds/3600
```

```
console.log(seconds + " seconds is equal to " + hours + " hours.");

let meters=parseFloat(prompt("Enter No.of meters:"))
let millimeters=meters*1000
console.log(meters + " meters is equals to " + millimeters +" millimeters")

let rupee=parseFloat(prompt("Rupees:"))
let dollor=rupee*0.012
console.log(rupee + " rupees is equals to " + dollor + " dollors")

let principal=parseFloat(prompt("Enter the principal amount:"))
let rate=parseFloat(prompt("Enter the rate of intrest in %:"))
let time=parseFloat(prompt("Enter the time in years: "))
let SI=(principal*time*rate)/100
console.log("simple intrest:",SI)

let a=parseFloat(prompt("enter A value:"))
let b=parseFloat(prompt("enter B value:"))
let res=(a>b)?'a is greater than b':"b is greater than a"
console.log(res)

let a=parseInt(prompt("enter a value:"))
let res=(a%2==0)?'Given number is even':'Given number is odd'
console.log(res)

let a=parseFloat(prompt("Enter a value:"))
let res=(a>0)?'Given number is positive':'Given number is negative'
console.log(res)

let a=parseInt(prompt("Enter a value:"))
let res=(a%5==0)?"Given value is divsible by 5":"Given value is not divisible by 5"
console.log(res)

let a=parseInt(prompt("Enter a value:"))
let res= (a%2==0 && a%3==0 && a%4==0) ? `${a} is divisible by 2, 3, and 4`:`${a} is not divisible by
2, 3, and 4`
console.log(res);

let year=parseInt(prompt("Enter a year:"))
let res=(year%4==0 && (year%100!=0 || year%400==0))? `${year} is a leap year`: `${year} is not a leap
year`
console.log(res)
```

1.