Name – Rasika Dhavale

If-else assignment programs

1. **Enter two numbers and find the biggest number.**

```
let input1 = parseInt(prompt('Enter first number:'));
let input2 = parseInt(prompt('Enter second number:'));
if (input1 == input2) {
    console.log(input1 + " is equal to " + input2);
    }
else if (input1 > input2) {
    console.log(input1 + " is larger than " + input2);
    }
else {
    console.log(input1 + " is lesser than " + input2);
}
```

2. **Enter a number and check if it is odd or even.**

```
let num = parseInt(prompt('Enter a number:'));
if (num%2 == 0) {
    console.log(num + " is an even number ");
}
else {
    console.log(num + " is an odd number");
}
```

3. **Enter a number and check it is positive negative or zero**

```
let num = parseInt(prompt('Enter a number:'));
if (num < 0) {
    console.log(num + " is negative");
}
else if (num == 0){
    console.log(num + " is zero");
}
else
{
    console.log(num + " is positive");
 }
```

4. **Enter a number and check if it is divisible by 3 or 5.**

```
let num = parseInt(prompt('Enter number:'));
if (num%3 == 0) {
    console.log(num + " is divisible by 3 ");
}
else if(num%5 == 0) {
    console.log(num + " is divisible by 5");
```

```
}
else {
    console.log(num + " is neither divisible by 3 & 5”);
}
```

5. Enter a number and find its absolute value.

```
let num = parseInt(prompt(‘Enter number:’));
if (num < 0) {
    num = -num
    console.log(num);
}
else {
    console.log(num);
}
```

6. Enter 3 number and find biggest of them (also try this problem with ternary)

```
let input1 = parseInt(prompt(‘Enter first number:’));
let input2 = parseInt(prompt(‘Enter second number:’));
let input3 = parseInt(prompt(‘Enter third number:’));

if (input1 >= input2 && input1 >= input3) {
    console.log(input1 + " is greater than " + input2 +” & ” + input3);
    }
else if (input2 >= input1 && input2 >= input3) {
    console.log(input2 + " is greater than " + input1 +” & ” + input3);
    }
else {
    console.log(input3 + " is greater than " + input1 +” & ” + input2);
}
```

Using Ternary operator:

```
let n1 = parseInt(prompt(‘Enter first number:’));
let n2 = parseInt(prompt(‘Enter second number:’));
let n3 = parseInt(prompt(‘Enter third number:’));
let max = (n1 > n2) ? (n1 > n3 ? n1 : n3) : (n2 > n3 ? n2 : n3);
console.log( "Largest number among "+ n1 + ", " + n2 + " and "+ n3 + " is " + max);
```

7. Enter 3 numbers and find the second smallest number.

```
let n1 = parseInt(prompt(‘Enter first number:’));
let n2 = parseInt(prompt(‘Enter second number:’));
let n3 = parseInt(prompt(‘Enter third number:’));
let second_small = (n1<n2 && n2<n3)?n2 : (n1>n2 && n1<n3) ? n1 : n3;
console.log( "Second small number among "+ n1 + ", " + n2 + " and "+ n3 + " is " +
second_small);
```

8. Enter three angles of triangle and check if triangle is valid or not

```
let input1 = parseInt(prompt('Enter first angle:'));
let input2 = parseInt(prompt('Enter second angle:'));
let input3 = parseInt(prompt('Enter third angle:'));
let sum = input1+input2+input3;
if (sum == 180 && input1 != 0 && input2 != 0 && input3 != 0) {
    console.log("Valid Triangle");
    }
else if (input2 >= input1 && input2 >= input3) {
    console.log("Invalid Triangle");
    }
```

9. Enter 3 sides of a triangle and check if triangle is valid or not. If valid than check if it is equilateral, isosceles or scalene traingle (also do this problem without nested if)

```
let input1 = parseInt(prompt('Enter first side:'));
let input2 = parseInt(prompt('Enter second side:'));
let input3 = parseInt(prompt('Enter third side:'));

if (input1 == input2 && input2 == input3) {
    console.log("Equilateral Triangle");
}
    else if (input1 == input2 || input2 == input3 || input1 == input3) {
    console.log("Isosceles Triangle");
}
    else{
    console.log("Scalene Triangle");
}
```

Using Ternary operator:

```
let a = parseInt(prompt('Enter first angle:'));
let b = parseInt(prompt('Enter second angle:'));
let c = parseInt(prompt('Enter third angle:'));
let sum = a+b+c;
let check;
if(a!=0 && b!=0 && c!=0){
    check = (sum== 180 && a==b && b==c && a==c) ? console.log("Triangle is valid
    type equilateral triangle") : (sum== 180 && a!=b && b!=c && a!=c) ?
    console.log("triangle is valid type scalene triangle") : (sum == 180) ?
    console.log("triangle is valid type isosceles triangle") : console.log("triangle is not
    valid")
}
else{
  console.log("triangle is not valid");
}
```

10. Enter a year and check if the year is leap year or not(2100 is not a leap year)

```
let year = parseInt(prompt('Enter year:'));
if ((year % 4 == 0) && (year % 100 == 0) || (year % 400 == 0)) {
      console.log(year + "is a leap year");
}
else {
      console.log(year + " is not a leap year");
}
```

11. Enter a 3 digit number and check if it's reverse is equal to the original number.

```
var tmp=0, x, num, y;
num = parseInt(prompt('Enter 3 digit number'));
y = num;
while(num > 0)
{
        x = num%10;
        num = parseInt(num/10);
        tmp = tmp*10+x;
}
if(tmp == y)
{
        console.log("The number is reverse of original number");
}
else
{
        console.log("The number is not reverse of original number");
}
```

12. Enter a number from 0-6 and print day of week according, 0 for Sunday , 1 for Monday and so onn.

```
let day = parseInt(prompt('Enter numbers between 0 to 6')) ;
switch (day) {
    case 0:
        day = "Sunday";
        break;
    case 1:
        day = "Monday";
        break;
    case 2:
        day = "Tuesday";
        break;
    case 3:
        day = "Wednesday";
        break;
    case 4:
        day = "Thursday";
```

```
            break;
    case 5:
            day = "Friday";
            break;
    case  6:
            day = "Saturday";
            break;
    default:
            day = “Please enter number from 0 to 6”;
}
console.log(day);
```

13. Enter marks in five subjects and find avg and grade .

rule for grade:
avg > = 90 , Grade A
avg > = 80 and less than 90, Grade B
avg > = 70 and less than 80, Grade C
Else: Low grade

```
let m1,m2,m3,m4,m5;
m1 = parseInt(prompt(‘Enter marks of subject 1’));
m2 = parseInt(prompt(‘Enter marks of subject 2’));
m3 = parseInt(prompt(‘Enter marks of subject 3’));
m4 = parseInt(prompt(‘Enter marks of subject 4’));
m5 = parseInt(prompt(‘Enter marks of subject 5’));
sum=m1+m2+m3+m4+m5;
console.log("sum="+sum);
avg=sum/5;
console.log("avg="+avg);
if(avg>= 90)
        grade = "A";
 else if(avg >= 80 && avg <90)
        grade="B";
 else if(avg >= 70 && avg <80)
        grade ="C";
 else
        grade ="Low grade";
console.log(" grade ="+grade);
```

14. Enter electricity unit and calculate amount to pay

For first 50 units, Rs: 1/unit
For next 100 units, 2/unit
For next 100 units, 3/ units
For units above 250, 4/units
For all bills above 150 rupees additional surcharge of 20% of total bill amount is added.

```
let units = parseInt(prompt(‘Enter electricity units’));
let bill = 0;
if(units<=50)
        bill  = units*1;
```

```
else if(units <=150)
        bill = 50*1 + (units-50)*2;
else if(units <=250)
        bill = 50*1 + 100*2 + (units-150)*3;
else if(units>250)
        bill = 50*1 + 100*2 + 150*3 + (units-250) *4;
if(bill>150)
        bill = bill + bill*0.2;
console.log(bill);
```

15. Enter a number and print "Hello" if divisible by 3. Print "World" if divisible by 5. And print "HelloWorld" if divisble by 15.

```
let i = parseInt(prompt('Enter a number'));
 if (i % 3 === 0 && i % 5 === 0)
        console.log("hello world");
else if (i % 3 === 0)
        console.log("hello");
else if (i % 5 === 0)
        console.log("world");
```

16. Check if a number is even or odd by switch case

```
let num = parseInt(prompt('Enter a number'));
let x=num%2;
switch(x){
  case 0:
        console.log(num + " is an even number");
        break;
  case 1:
        console.log(num + " is an odd number");
        break;
}
```