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**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);

}

1. **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”);

}

1. **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”);

}

1. **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”);

}

1. **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);

}

1. **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);

1. **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);

1. **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”);

}

1. **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");

}

1. **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”);

}

1. **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");

             }

1. **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);

1. **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);

1. **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);

1. **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");

1. **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;

}