// Ex. 1  
const firstSide = 30;  
const secondSide = -30;  
const thirdSide = 180 - firstSide - secondSide;  
  
if (firstSide > 0 && secondSide > 0) {  
 console.log("The angle of third side = " + thirdSide);  
} else {  
 console.log("Given parameters are wrong, they must be positives");  
}

// Ex. 2

const number = 17;

const firstValue = String(number);

const secondValue = String(number) + firstValue;

const thirdValue = String(number) + secondValue;

const sum = +firstValue + (+secondValue) + (+thirdValue);

console.log(sum);

// Ex.3

const number = 8376090;

const lastDigit = number % 10;

let result = number;

if (lastDigit !== 0) {

result = Number(String(lastDigit) + Math.floor(number / 10));

}

console.log(result);

// Ex. 4

let num1 = 7;  
let num2 = 52;  
let num3 = -23;  
let num4 = 9;  
let num5 = -81;  
let avarage = (num1 + num2 + num3 + num4 + num5) / 5;  
  
console.log("The avarage = " + avarage);

// Ex. 5  
const n = 35;  
  
if ( (n % 3 === 0) && (n % 5 === 0) && (n % 7 === 0) ) {

console.log(`${n} is a multiple of 3, 5 and 7`);

} else if ((n % 3 === 0) && (n % 5 === 0)) {

console.log(`${n} is a multiple of 3 and 5`);

} else if ((n % 3 === 0) && (n % 7 === 0)) {

console.log(`${n} is a multiple of 3 and 7`);

} else if ((n % 5 === 0) && (n % 7 === 0)) {

console.log(`${n} is a multiple of 5 and 7`);

} else if (n % 3 === 0) {

console.log(`${n} is a multiple of 3`);

} else if (n % 5 === 0) {

console.log(`${n} is a multiple of 5`);

} else if (n % 7 === 0) {

console.log(`${n} is a multiple of 7`);

} else {

console.log(`${n} is not a multiple of 3, 5 or 7`);

}

// Ex. 6

const age = 8;

const ageUnit = "months";

const answer;

if (ageUnit === "months") {

if (age < 1 || age > 12) {

answer = "Error: wrong number of months provided as an age"

} else {

answer = "baby";

}

} else if (ageUnit === "years") {

if (age >= 1 && age <= 2) {

answer = "toddler";

} else if (age >= 3 && age <= 12) {

answer = "child";

} else if (age >= 13 && age <= 17) {

answer = "teenager";

} else if (age >= 18) {

answer = "adult";

}

}

console.log(answer);

// Ex. 7

let n1 = -23;  
let n2 = -456;  
let n3 = 0;  
  
let \_tmp;  
  
if (n1 > n2) { \_tmp = n1; n1 = n2; n2 = \_tmp }  
if (n1 > n3) { \_tmp = n1; n1 = n3; n3 = \_tmp }  
if (n2 > n3) { \_tmp = n2; n2 = n3; n3 = \_tmp }  
  
console.log(n1, n2, n3);

// Ex. 8

const mark1 = 39;  
const mark2 = 39;  
const mark3 = 80;  
  
let result;  
let sumOfMarks = mark1 + mark2 + mark3;  
let failedExamsCount = 0;

if (mark1 < 40) { failedExamsCount++ }  
if (mark2 < 40) { failedExamsCount++ }  
if (mark3 < 40) { failedExamsCount++ }  
  
if (failedExamsCount > 1) {  
 result = "Not passed";  
} else if (failedExamsCount === 0) {  
 result = "Passed";  
} else if (sumOfMarks / 3 >= 50) {  
 result = "Passed";  
} else {  
 result = "Not passed";  
}  
  
console.log(result);

// Ex. 9

let n1 = -14;  
let n2 = 5;  
let n3 = 0;

if (n1 === 0 || n2 === 0 || n3 === 0) {  
 sign = "unsigned";  
} else {  
 let s1 = n1 > 0 ? 1 : 0;  
 let s2 = n2 > 0 ? 1 : 0;  
 let s3 = n3 > 0 ? 1 : 0;  
  
 sign = ((s1 + s2 + s3) % 2) ? "+" : "-";  
}  
  
console.log(sign);

// Ex. 10

const a = 1;

const b = -4;

const c = 4;

const d = b\*\*2 - 4 \* a \* c;

if (d < 0) {

console.log("Solution does not exists");

} else if (a === 0) {

console.log("Enter valid numbers");

} else if(d === 0) {

const solution = -b / 2 \* a;

console.log(`Solution is ${solution}`);

} else {

const solution1 = (-b - Math.sqrt(d)) / (2 \* a);

const solution2 = (-b + Math.sqrt(d)) / (2 \* a);

console.log(`Solutions are ${solution1} and ${solution2}`);

}

// Ex. 11

let n = +prompt();

let i = 0;

let j = 0;

if (n % 2 === 0 && !(Math.floor(n / 10))) {

i += 1;

}

if (n % 3 === 0 && n % 10 === 1) {

j += 1;

}

// Ex. 12

const shape = "rectangle";

const height = 0;

const width = 5;

if (height > 0 && width > 0) {

if (shape === "rectangle") {

console.log(`Square of the ${shape} is ` + (height \* width));

} else if (shape === "triangle") {

console.log(`Square of the ${shape} is ` + (height \* width / 2));

}

} else {

console.log("Please enter only positives");

}