PROGRAM FOR GAME :

const prompt = require("prompt-sync")();

const mongoose=require("mongoose");

var attempts = 0 ;

do {

var rand = (Math.random() \* 10000).toFixed(0);

var s = new Set();

s.add(rand[0]);

s.add(rand[1]);

s.add(rand[2]);

s.add(rand[3]);

if (s.size == 4)

break;

} while (true);

var username=prompt("enter your name : ");

console.log(rand);

var st=performance.now();

do {

attempts++;

var val = prompt("enter 4 digit number");

if (rand == val)

{

console.log("win!!!");

break;

}

var output="";

for (var i = 0; i < rand.length; i++)

{

for(var j=0;j < val.length;j++)

{

if(rand[i]==val[j])

{

if(i==j)

output+="+";

else

output+="-";

}

}

} console.log(output);

} while (true);

var end=performance.now();

var time=end-st;

var min=(time/1000/60).toFixed();

var sec=(time/1000%60).toFixed();

console.log(username);

console.log(`execution time is ${min}:${sec} `);

console.log(`your total attempts is ${attempts}`);

mongoose.connect('mongodb://127.0.0.1:27017/usersdb')

.then(()=> console.log('connected to mongodb..'))

.catch(err=>console.log('could not connected to mongodb..',err))

const dataschema=new mongoose.Schema({

username:String,

attempts:Number,

time:{min:Number,

sec:Number},

});

const Data = mongoose.model('Data',dataschema);

async function createData(){

const data=new Data(

{

"username":username,

"attempts": attempts,

"time" :{"min" :min,

"sec" : sec,}

}

);

const result=await data.save();

console.log(result);

}

createData();

**Test Case:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Case Description | Steps | Test Data | Expected Result | Actual Results | Status  (Pass/Fail) |
| 1 | Check whether the number given as input by the user is same as of auto generated number by program. | 1. Run the program 2. Input player name 3. Input number(s) 4. Verify given numbers match the random number | Name: Mahesh  Enter 4 digit number: 5426 | +  +  -  -  Win!!  Name: Mahesh  execution time is 0:26  your total attempts is 3 | -  -  -  -  Win!!  Name: Mahesh  execution time is 0:26  your total attempts is 3 | Pass |
| 2 | Check whether the number given as input by the user is same as of auto generated number by program. | 1. Run the program 2. Input player name 3. Input number(s) 4. Verify given numbers match the random number | Name: Mahesh  Enter 4 digit number: 4562 | -  -  +  +  Win!!  Name: Mahesh  execution time is 0:30  your total attempts is 3 | +  -  -  +  Win!!  Name: Mahesh  execution time is 0:30  your total attempts is 3 | Pass |
| 3 | Check whether the number given as input by the user is same as of auto generated number by program | 1. Run the program 2. Input player name 3. Input number(s)   Verify given numbers match the random number | Name:  Mahesh  Enter 4 digit number: 5462 | +  -  -  +  Win!!  Name: Mahesh  execution time is 0:26  your total attempts is 3 | +  -  -  +  win!!  Name: Mahesh  execution time is 0:26  your total attempts is 3 | pass |