CODE:

const mongoose= require("mongoose");

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

const user = prompt("Enter a name:");

var rand,attempts = 0;

var start = new Date().getTime();

do{

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);

console.log(rand);

do{

attempts++;

var val = prompt("Enter a 4 digit number:");

if(rand == val)

{

console.log("You Won!!");

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);

console.log(`You completed the game in ${attempts} attempts`);

var end = new Date().getTime();

var time = end - start;

var ms = time,

min = Math.floor((time/1000/60) << 0),

sec = Math.floor((time/1000) % 60);

console.log(`Time-${min}:${sec}`);

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

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

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

const gameSchema = new mongoose.Schema({

user: String,

attempts:Number,

time:{

min:Number,

sec:Number,

}

});

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

async function createdata(){

const gamedata=new Data(

{

"user":user,

"attempts":attempts,

time:{

"min":min,

"sec":sec

}

}

);

const result=await gamedata.save();

console.log(result);

}

createdata();

**Test Case:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Case Description | Steps | Test Data | Expected Result | Actual Results | Status  (Pass/Fail) |
| T101 | 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: Divya  Enter a 4 digit number: 7586  Enter a 4 digit number: 9642  Enter a 4 digit number: 4128  Enter a 4 digit number: 4138 | -  -  +++  You Won!!  You completed the game in 4 attempts  Time : 0:22 | -  -  +++  You Won!!  You completed the game in 4 attempts  Time : 0:22 | Pass |
| T102 | 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: Sowmya  Enter a 4 digit number: 1846  Enter a 4 digit number: 3824  Enter a 4 digit number: 2814 | -+  ++  You Won  You completed the game in 3 attempts  Time : 1:32 | -+  ++  You Won  You completed the game in 3 attempts  Time : 1:32 | Pass |
| T103 | 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: Lakshmi  Enter a 4 digit number: 8654  Enter a 4 digit number: 9875  Enter a 4 digit number: 2544  Enter a 4 digit number: 8697  Enter a 4 digit number: 1936 | -  --  You Won  You completed the game in 5 attempts  Time: 1:22 | -  --  You Won  You completed the game in 5 attempts  Time: 1:22 | Pass |