Index.js

//Import modules:

const input = require('readline-sync');//Import readline-sync.

const averages = require('./ScoreCalcs/averages');//Import functions from averages.js.

const printAll = require('./display');//Import function from display.js.

const randomSelect = require('./randomSelect');//Import function from randomSelect.js.

//Candidate data:

let astronauts = ['Fox','Turtle','Cat','Hippo','Dog'];

const testTitles = ['Math','Fitness','Coding','Nav','Communication'];

let scores = [[95, 86, 83, 81, 76],[79, 71, 79, 87, 72],[94, 87, 87, 83, 82],[99, 77, 91, 79, 80],[96, 95, 99, 82, 70]];

//User interface:

let prompts = ['display all scores', 'average the scores for each test', 'average the scores for each astronaut','select the next spacewalker'];

for (let i = 0; i<prompts.length; i++){

let response = input.question(`Would you like to ${prompts[i]}? Y/N: `);

if (response.toLowerCase()==='y'){

if (i===0){

//Call 'printAll' here and pass in all necessary arguments.

printAll.printAll(astronauts, testTitles, scores);

} else if (i===1){

for (let j = 0; j<testTitles.length; j++){

//Call 'averageForTest' here. Pass in j and scores as arguments.

let avg = averages.averageForTest(j, scores);

console.log(`${testTitles[j]} test average = ${avg}%.`);

}

} else if (i===2){

for (let j = 0; j<astronauts.length; j++){

//Call 'averageForStudent' here. Pass in j and scores as arguments.

let avg = averages.averageForStudent(j, scores);

console.log(`${astronauts[j]}'s test average = ${avg}%.`);

}

} else {

//Call 'randomSelect' to pick a spacewalker from the astronauts array.

let walker = randomSelect.randomFromArray(astronauts);

console.log(`${walker} is the next spacewalker.`);

}

} else {

console.log("Option skipped.");

}

}

ScoreCalcs/averages.js

function averageForStudent(nameIndex,scores){

let sum = 0;

for (let i=0; i<scores.length; i++){

sum += scores[nameIndex][i];

}

let average = sum/scores[nameIndex].length;

return average;

}

function averageForTest(testIndex,scores){

let sum = 0;

for (let i=0; i<scores.length; i++){

sum += scores[i][testIndex];

}

let average = sum/scores[0].length;

return average;

}

//TODO: Export all functions within an object.

module.exports = {

averageForTest: averageForTest,

averageForStudent: averageForStudent

}

Display.js

function printAll(names, tests, scores){

// console.log(tests);

let header = 'Name';

let row = '';

for (let i = 0; i<tests.length; i++){

header += '\t'+tests[i];

}

console.log(header);

for (let name = 0; name<names.length; name++){

row = names[name];

for (let score = 0; score<scores[name].length;score++){

row += '\t'+scores[name][score];

}

console.log(row);

}

return;

}

function printStudentScores(index,students,tests,scores){

console.log(`Test results for ${students[index]}:`);

for (let i = 0; i<tests.length; i++){

console.log(`${tests[i]} = ${scores[index][i]}%.`);

}

return;

}

function printTestScores(index,test,students,scores){

console.log(`Class results for ${test} test:`);

for (let i = 0; i<students.length; i++){

console.log(`${students[i]} = ${scores[i][index]}%.`);

}

return;

}

module.exports = {

printAll: printAll

}

randomSelects.js

function randomFromArray(arr){

//Your code here to select a random element from the array passed to the function.

let randomIndex = Math.round(Math.random()\*10)

return arr[randomIndex];

}

//TODO: Export the randomFromArray function.

module.exports = {

randomFromArray: randomFromArray

}

Package-lock.json

{

"requires": true,

"lockfileVersion": 1,

"dependencies": {

"readline-sync": {

"version": "1.4.10",

"resolved": "https://registry.npmjs.org/readline-sync/-/readline-sync-1.4.10.tgz",

"integrity": "sha512-gNva8/6UAe8QYepIQH/jQ2qn91Qj0B9sYjMBBs3QOB8F2CXcKgLxQaJRP76sWVRQt+QU+8fAkCbCvjjMFu7Ycw=="

}

}

}