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// William Schulte
// wschulte@iastate.edu
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const products = [
  ['product001_1','Ceiling Fan','65 inches','Minka','Aire Xtreme H2O Coal
Wet','Remote Control',489.95],
  ['product001_2','Ceiling Fan','65 inches','Minka','Aire Windmolen Textured Coal
LED Wet','Smart',569.95],
  ['product001_3','Ceiling Fan','60 inches','Minka','Aire Dream Star Graphite
Steel LED','Remote Control',799.95],
  ['product002_1','Ceiling Fan','56 inches','Mach 5','Oil-Rubbed Bronze and Koa
LED Damp','Remote Control',379.95],
  ['product003_1','Ceiling Fan','60 inches','Monte Carlo Maverick','Matte
Black','Remote Control',659.99],
  ['product003_2','Ceiling Fan','70 inches','Monte Carlo Maverick','Matte
Black','Remote Control',743.99],
  ['product003_3','Ceiling Fan','70 inches','Monte Carlo Maverick','Walnut
Wood','Remote Control',743.99],
  ['product003_4','Ceiling Fan','70 inches','Monte Carlo Maverick','Aged
Pewter','Remote Control',743.99],
  ['product004_1','Ceiling Fan','52 inches','Casa','Delta-Wing Bronze Damp
Outdoor LED','Remote Control',249.95],
  ['product004_2','Ceiling Fan','56 inches','Casa','Vieja Rally Bronze Damp Rated
LED','Remote Control',299.99],
  ['product011_1','Wall Light','11 inches','Hinkley Sawyer','High Sequoia Wood
Finish Rustic','Wall Sconce',127.2],
  ['product012_1','Wall Light','17 inches','Feiss Loras','High Dark Weathered
Iron','Wall Sconce',115.98],
  ['product013_1','Wall Light','14 inches','Menlo Park','High Old Silver by Troy
Lighting','Wall Sconce',265.6],
  ['product014_1','Wall Light','11 1/4 inches','Hinkley Congress','High Clear
Glass Chrome','Wall Sconce',175.2],
  ['product015_1','Wall Light','8 1/4 inches','Hudson Valley Barron','H Polished
Nickel Sconce','Wall Sconce',315.2],
  ['product030_1','Jacket','Sizes S (34 to 36) M (38 to 40) L (42 to 44) XL (46
to 48) XXL (50 to 52)','Spyfire','Spyfire Jacket',' Kuhl sleek warm jacket boasts a
baffled water-repellent nylon/spandex shell with 800-fill-power goose down.
Reinforced shoulders zipper closures. Machine wash',249],
  ['product031_1','Jacket','Sizes XS (0 to 2) S (4 to 6) M (8 to 10) L (12 to 14)
XL (16 to 18) XXL (20 to 22). Approx. 46-1/2 L inches','Hotchkiss','Hotchkiss
Quilted Jacket',' Quilted longline jacket with shirt tail hem matching corduroy
collar and patch pockets. Polyester. Dry clean.',198],
  ['product032_1','Jacket','Sizes S M L XL XXL.','Tribal Stripe','Tribal Stripe
Two-Pocket Jacket',' Yarn-dyed indigenous-inspired pattern will catch your
attention in this chambray-lined button front shirt with two pockets corduroy-lined
neckline and side gussets. Cotton. Machine wash.',178]
]
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// Exercise 1
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function minPrice_usingArray (minProduct_Array , products){
  let minPrice = 999999;
  for (let product of products){
    //console.log(product[6]);
    if (product[6] < minPrice){
      minPrice = product[6];
    }
  }
}
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        minProduct_Array[0] = product[0]; //product id
        minProduct_Array[1] = product[1]; //product name
        minProduct_Array[2] = product[4]; //short description
        minProduct_Array[3] = product[6]; //price
    }
}

// productId , productName , shortDescription , Price
let minProduct_Array = [ "", "", "", 0 ];
// call the function :
minPrice_usingArray (minProduct_Array , products);
// Report : ProductId , ProductName, ShortDescription , Price in console.log()
using backticks in Literal Templates :

console.log(`Report product with minimum price :
Product Id : ${minProduct_Array [0]}
Product Name : ${minProduct_Array [1]}
Description : ${minProduct_Array [2]}
Price : ${minProduct_Array [3]}`);

// Exercise 2
// -----

function minPrice_usingObject (minProduct_Object , products){
    let minPrice = 999999;
    for (let product of products){
        //console.log(product[6]);
        if (product[6] < minPrice){
            minPrice = product[6];
            minProduct_Object["minProductId"] = product[0]; //product id
            minProduct_Object["minProductName"] = product[1]; //product name
            minProduct_Object["shortDescription"] = product[4]; //short description
            minProduct_Object["price"] = product[6]; //price
        }
    }
}

//productId , productName , shortDescription , Price
let minProduct_Object = { "minProductId": "",
                          "minProductName": "",
                          "shortDescription": "",
                          "price": 0};

// call the function :
minPrice_usingObject (minProduct_Object , products);
// Report: ProductId , ProductName, ShortDescription , Price in console.log() using
backticks in Literal Templates :
console.log(`Report product with minimum price :
Product Id : ${minProduct_Object ["minProductId"]}
Product Name : ${minProduct_Object ["minProductName"]}
Description : ${minProduct_Object ["shortDescription"]}
Price : ${minProduct_Object ["price"]}`);

// Exercise 3
// -----

function per_product(sales_per_product_name, products){
    for (let product of products){

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        if (sales_per_product_name.hasOwnProperty(product[1])){
            sales_per_product_name[product[1]] =
Number(sales_per_product_name[product[1]]) + Number(product[6]);
        }
        else{
            sales_per_product_name[product[1]] = Number(product[6]);
        }
    }
}
// product_name : value
let sales_per_product_name = {};
// call the function
per_product(sales_per_product_name, products);
// Report: : Product name, sum of sales :
console.log (`Report Sales per Product Name`)
for(let name in sales_per_product_name){
    console.log(`Product Name : ${name} Sales : ${sales_per_product_name [name]}`);
}

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