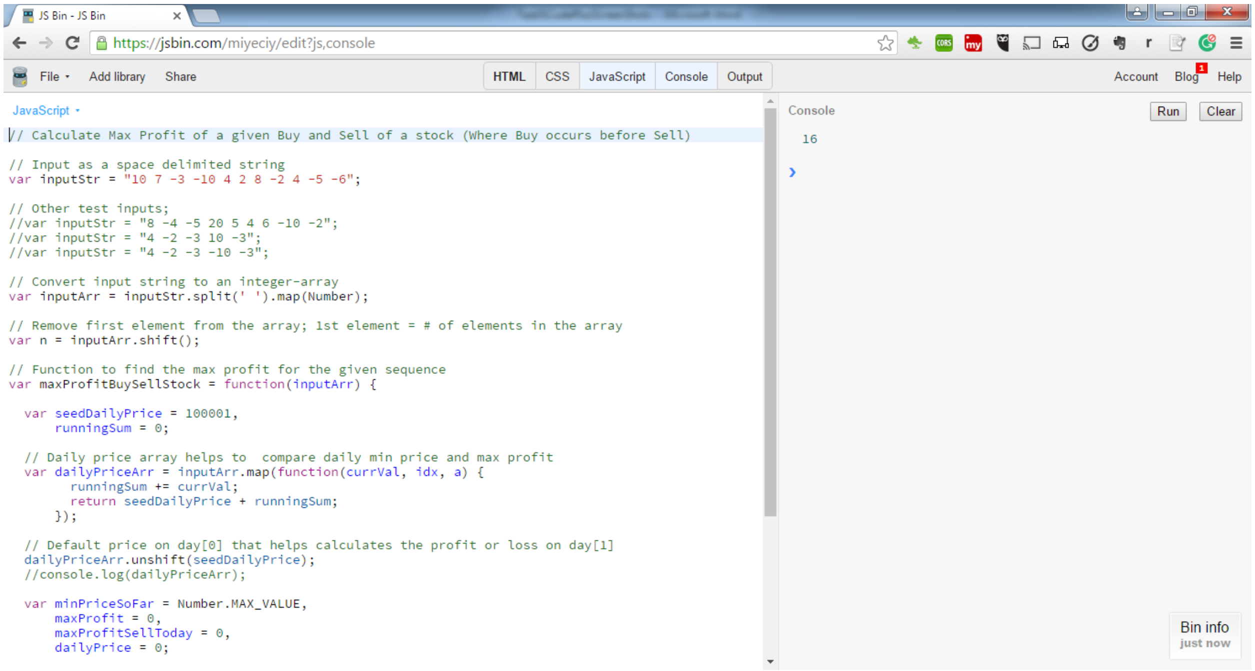
Max Profit for Buying and Selling a Stock – Screen Shot 1



```javascript
// Calculate Max Profit of a given Buy and Sell of a stock (Where Buy occurs before Sell)

// Input as a space delimited string
var inputStr = "10 7 -3 -10 4 2 8 -2 4 -5 -6";

// Other test inputs;
//var inputStr = "8 -4 -5 20 5 4 6 -10 -2";
//var inputStr = "4 -2 -3 10 -3";
//var inputStr = "4 -2 -3 -10 -3";

// Convert input string to an integer-array
var inputArr = inputStr.split(' ').map(Number);

// Remove first element from the array; 1st element = # of elements in the array
var n = inputArr.shift();

// Function to find the max profit for the given sequence
var maxProfitBuySellStock = function(inputArr) {

  var seedDailyPrice = 100001,
      runningSum = 0;

  // Daily price array helps to  compare daily min price and max profit
  var dailyPriceArr = inputArr.map(function(currVal, idx, a) {
        runningSum += currVal;
        return seedDailyPrice + runningSum;
      });

  // Default price on day[0] that helps calculates the profit or loss on day[1]
  dailyPriceArr.unshift(seedDailyPrice);
  //console.log(dailyPriceArr);

  var minPriceSoFar = Number.MAX_VALUE,
      maxProfit = 0,
      maxProfitSellToday = 0,
      dailyPrice = 0;
```

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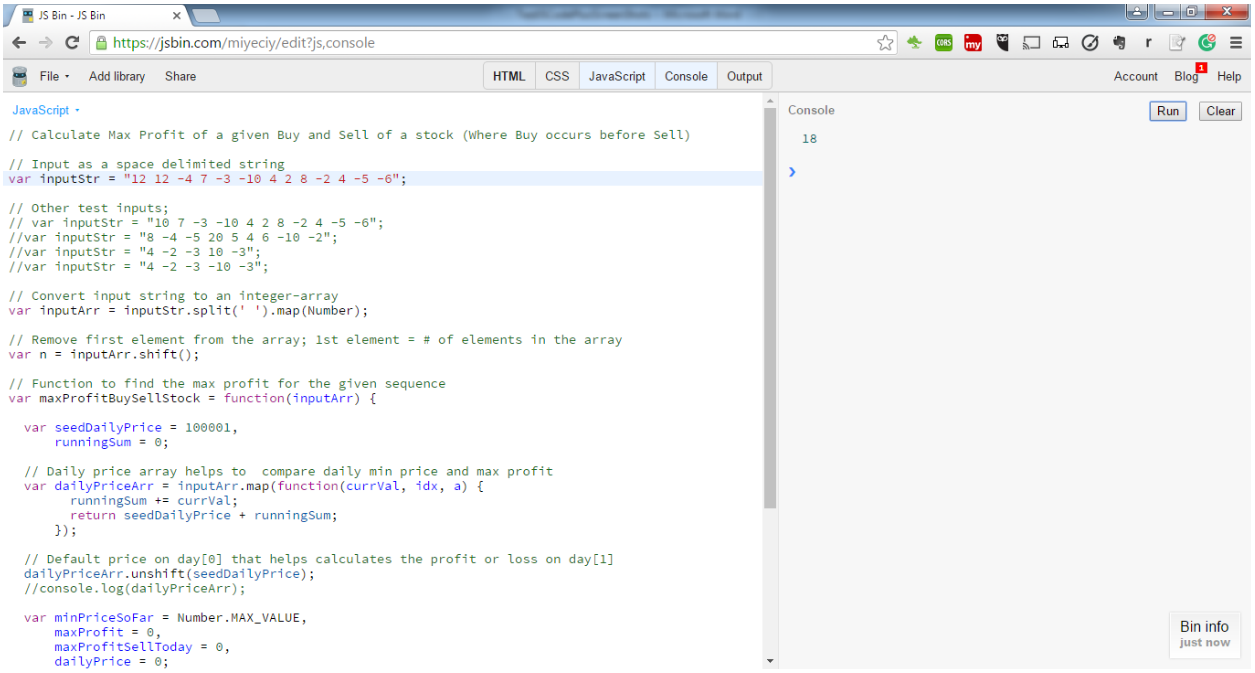
```

Max Profit for Buying and Selling a Stock – Screen Shot 2



```javascript
// Calculate Max Profit of a given Buy and Sell of a stock (Where Buy occurs before Sell)

// Input as a space delimited string
var inputStr = "12 12 -4 7 -3 -10 4 2 8 -2 4 -5 -6";

// Other test inputs;
// var inputStr = "10 7 -3 -10 4 2 8 -2 4 -5 -6";
//var inputStr = "8 -4 -5 20 5 4 6 -10 -2";
//var inputStr = "4 -2 -3 10 -3";
//var inputStr = "4 -2 -3 -10 -3";

// Convert input string to an integer-array
var inputArr = inputStr.split(' ').map(Number);

// Remove first element from the array; 1st element = # of elements in the array
var n = inputArr.shift();

// Function to find the max profit for the given sequence
var maxProfitBuySellStock = function(inputArr) {

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        runningSum += currVal;
        return seedDailyPrice + runningSum;
      });

  // Default price on day[0] that helps calculates the profit or loss on day[1]
  dailyPriceArr.unshift(seedDailyPrice);
  //console.log(dailyPriceArr);

  var minPriceSoFar = Number.MAX_VALUE,
      maxProfit = 0,
      maxProfitSellToday = 0,
      dailyPrice = 0;
```
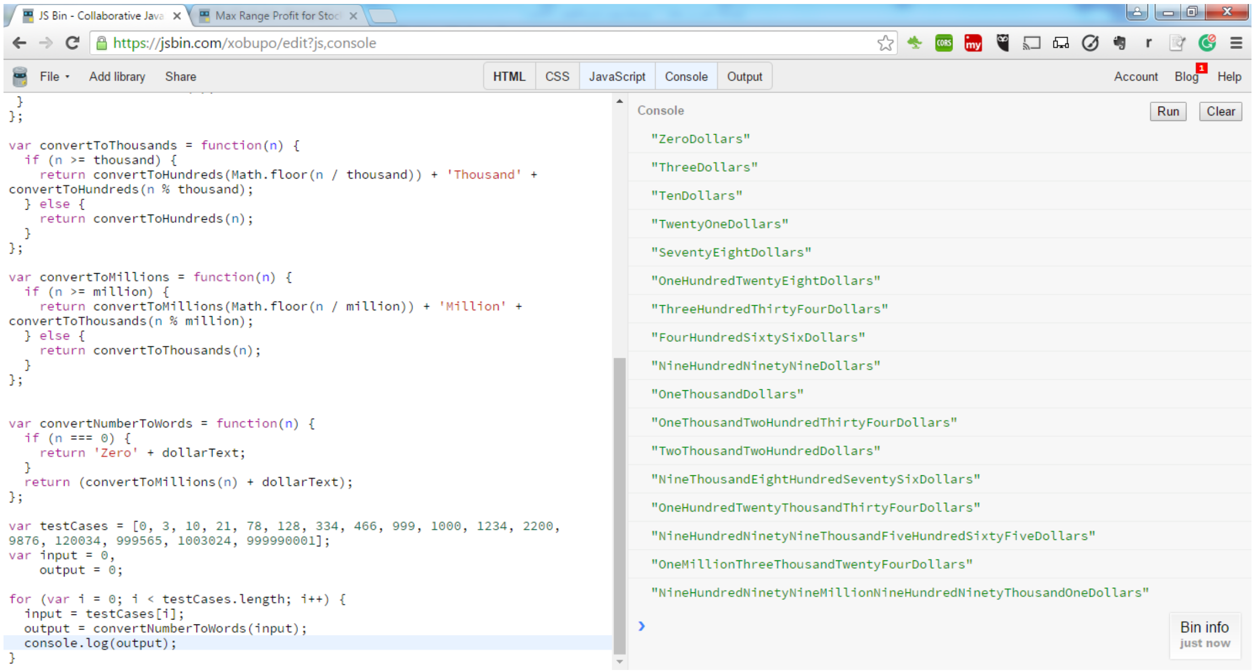

```
18
```

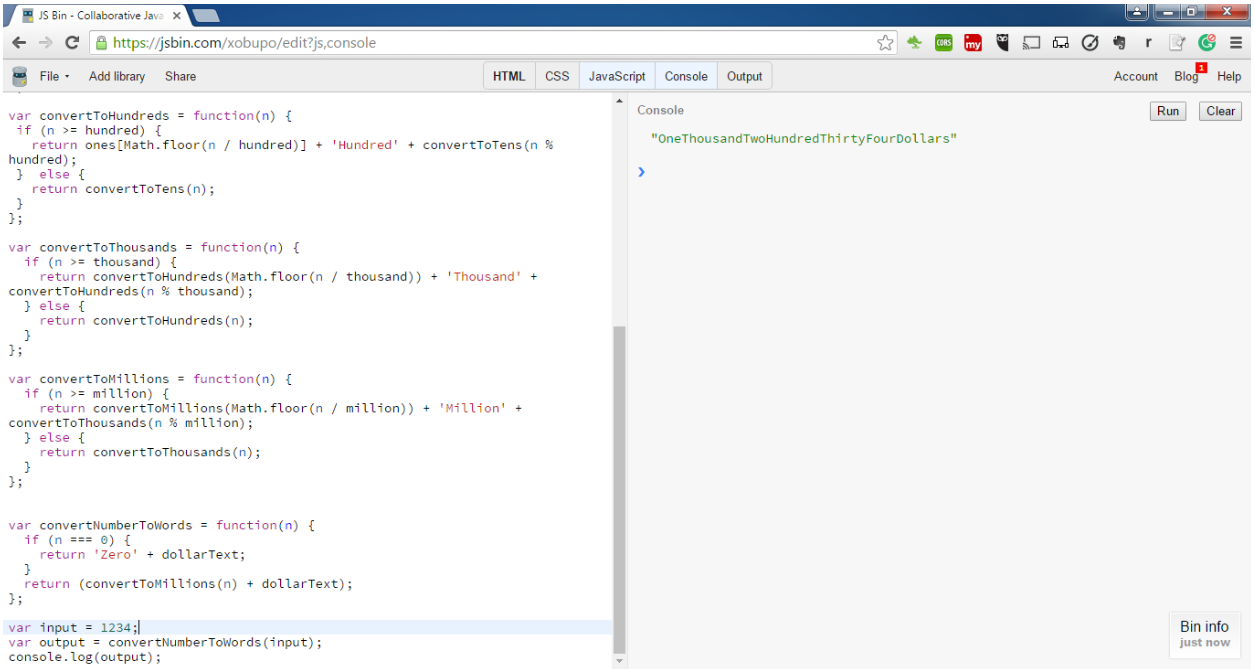
Convert Number to Words – Screen Shot 1



```
 }
};

var convertToThousands = function(n) {
  if (n >= thousand) {
    return convertToHundreds(Math.floor(n / thousand)) + 'Thousand' +
convertToHundreds(n % thousand);
  } else {
    return convertToHundreds(n);
  }
};

var convertToMillions = function(n) {
  if (n >= million) {
    return convertToMillions(Math.floor(n / million)) + 'Million' +
convertToThousands(n % million);
  } else {
    return convertToThousands(n);
  }
};


var convertNumberToWords = function(n) {
  if (n === 0) {
    return 'Zero' + dollarText;
  }
  return (convertToMillions(n) + dollarText);
};

var testCases = [0, 3, 10, 21, 78, 128, 334, 466, 999, 1000, 1234, 2200,
9876, 120034, 999565, 1003024, 999990001];
var input = 0,
    output = 0;

for (var i = 0; i < testCases.length; i++) {
  input = testCases[i];
  output = convertNumberToWords(input);
  console.log(output);
}
```

```
"ZeroDollars"
"ThreeDollars"
"TenDollars"
"TwentyOneDollars"
"SeventyEightDollars"
"OneHundredTwentyEightDollars"
"ThreeHundredThirtyFourDollars"
"FourHundredSixtySixDollars"
"NineHundredNinetyNineDollars"
"OneThousandDollars"
"OneThousandTwoHundredThirtyFourDollars"
"TwoThousandTwoHundredDollars"
"NineThousandEightHundredSeventySixDollars"
"OneHundredTwentyThousandThirtyFourDollars"
"NineHundredNinetyNineThousandFiveHundredSixtyFiveDollars"
"OneMillionThreeThousandTwentyFourDollars"
"NineHundredNinetyNineMillionNineHundredNinetyThousandOneDollars"
>
```

Convert Number to Words – Screen Shot 2



```
var convertToHundreds = function(n) {
 if (n >= hundred) {
   return ones[Math.floor(n / hundred)] + 'Hundred' + convertToTens(n %
hundred);
 }  else {
   return convertToTens(n);
 }
};

var convertToThousands = function(n) {
  if (n >= thousand) {
    return convertToHundreds(Math.floor(n / thousand)) + 'Thousand' +
convertToHundreds(n % thousand);
  } else {
    return convertToHundreds(n);
  }
};

var convertToMillions = function(n) {
  if (n >= million) {
    return convertToMillions(Math.floor(n / million)) + 'Million' +
convertToThousands(n % million);
  } else {
    return convertToThousands(n);
  }
};


var convertNumberToWords = function(n) {
  if (n === 0) {
    return 'Zero' + dollarText;
  }
  return (convertToMillions(n) + dollarText);
};

var input = 1234;
var output = convertNumberToWords(input);
console.log(output);
```

```
"OneThousandTwoHundredThirtyFourDollars"
>
```