Week 6 Quiz

5 Questions

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1. Which of the following features does TypeScript add to JavaScript?

25/126 **A** Static typing

21/126 **B** Type checking

4/126 **C** Objects

76/126 **D** All of the above

2. Which of the folllowing TypeScript functions would transpile to the JavaScript function below:
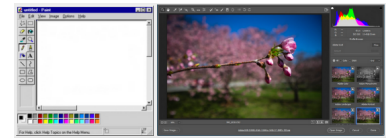
```
function pythagorean(a, b) {
    var cSq = a * a + b * b;
    return Math.sqrt(cSq);
}
```

32/125 **A**
```
function pythagorean(a:number, b:number):number {
        var cSq = a*a + b*b;
        return Math.sqrt(cSq);
    }
```

6/125 **B**
```
function pythagorean(a:number, b:number) {
        var cSq = a*a + b*b;
        return Math.sqrt(cSq);
    }
```

10/125 **C**
```
function pythagorean(a, b) {
        var cSq = a * a + b * b;
        return Math.sqrt(cSq);
    }
```

37/125 **D** A and B

40/125 **E** A, B, and C

3. Which of the following is NOT a static type?

8/126 **A** Number

106/126 **B** Var

7/126 **C** Boolean

5/126 **D** String

4. Relative to each other, what are the threshold and ceiling of Adobe Photoshop and Microsoft Paint?

77/123 **A** Photoshop: high ceiling, high threshold; Paint: low ceiling, low threshold

20/123 **B** Photoshop: high ceiling, low threshold; Paint: low ceiling, high threshold

9/123 **C** Photoshop: low ceiling, high threshold; Paint: high ceiling, low threshold

4/123 **D** Photoshop: low ceiling, low threshold; Paint: high ceiling, high threshold

13/123 **E** I have nooooo idea!

5. How would this visualization be specified in Vega-Lite?

10/122 **A** mark: "point",
 encoding: {
  x: {field: "MPG", type: "ordinal"},
  y: {field: "Horsepower", type: "ordinal"},
  color: {field: "Origin", type: "nominal"}
 }

104/122 **B** mark: "point",
 encoding: {
  x: {field: "Horsepower", type: "quantitative"},
  y: {field: "MPG", type: "quantitative"},
  color: {field: "Origin", type: "nominal"}
 }

7/122 **C** mark: "ticks",
 encoding: {
  x: {field: "Horsepower", type: "quantitative"},
  y: {field: "MPG", type: "quantitative"},
  color: {field: "Origin", type: "nominal"}
 }

1/122 **D** mark: "ticks",
 encoding: {
  x: {field: "MPT", type: "ordinal"},
  y: {field: "Horsepower", type: "ordinal"},
  color: {field: "Origin", type: "nominal"}
 }