Assignment Title

Assignment XX

CourseID: CourseName School, Semester

1. Question Components

A standard question:

[4.0 pts] What is $2 + 2$? Write a statement to evaluate in Python.

A multi-choice question:

[3.0 pts] What will the following Python expression be equivalent to?

```
2 + 2
```

- ☐ `4`
- ☐ `len(np.array([1, 2, 3, 4]))`
- ☐ `2`
- ☐ `6`
- ◯ None of the above

[3.0 pts] You can display options with different column lengths.

◯ Option 1 ◯ Option 2 ◯ Option 3 ◯ Option 4

An answer bank:

A x^2	**B** A quadratic	**C** `x ** 2`
D A quartic	**E** $x \cdot x \cdot x$	**F** `pow(x, 3)`

[1.0 pt] What of the following functions are even?

☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G** ☐ **H** ◯ None of the above

A x^2	**B** Any linear function	**C** `x ** 2`
D Any quadratic function	**E** $x \cdot x \cdot x$	**F** `pow(x, 3)`
G $\sin(x)$	**H** Any quartic function	**I** $\cos(x)$

[1.0 pt] What of the following functions are even?

☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G** ☐ **H** ☐ **I** ◯ None of the above

2. [6.0 points] Second Section

Content in this second section does total up points

(a) [2.0 pts] Subquestion

(b) [2.0 pts] Subquestion

(c) [2.0 pts] Subquestion

3. Callouts

> You may create a callout with an empty string `""` to omit the title. Any non-special typed callout will be grey by default.

Special callout types (`Definition, Formula, Method, Example`)

> **Definition**
> A definition callout

> **Formula**
> A formula callout

> **Method**
> A method callout

> **Example**
> An example callout

4. Code Blanks

Complete the `distance` function below, which takes arrays of two predictor variables `p1` and `p2` and returns a distance between a new point `row` and each row in the training data.

```
def distance(p1, p2, row):
    arr = np.array(row)
    v1 = arr._____[A]_____
    v2 = arr._____[B]_____
    distances = _____[C]_____
    _____[D]_____
```

(a) [2.0 pts] What function should be used in blanks `[A]` and `[B]` to retrieve the two items in the array?

(b) [2.0 pts] Fill in the blank `[C]`, such that the `distance` function returns an **array** of Euclidean distances.

(c) [1.0 pt] Fill in the blank `[D]`.