

PIC 10A 1C Week 10a Mini quiz. TA: Eric Kim

1. Spot the Errors [2 minutes]

Consider the following function that computes the mean (average) of a vector of integers:

```
int vecmean(vector<int> nums) {
```

```
    double mean = 0.0;
```

```
    for (int i = 0; i < nums.size(); ++i) {
```

```
        mean = mean + nums[i];
```

```
}
```

```
    return mean / nums.size();
```

```
}
```

Correct any issues with the code, giving a brief explanation for each correction.

2. Want to play a game? [4 minutes]

We wish to create a simple RPG-like game, involving Player objects. Write both the class interface and the class implementation following this behavior:

- Each Player has an integer amount of **health**, and a **name**.
- The **default constructor** should set **health to 10**, and **name to "Dummy"**
- Write a **two-argument constructor** that sets the health/name to values that are passed in
- Write a **heal()** method that increments the health by +2.
- Write **get_health()** and **get_name()** getter methods.

Make sure to follow public/private conventions, as well as const/reference conventions. You must define all implementations **outside of the class** - this includes constructors!