

# AI Code Review Report

**Language:** python

**Generated:** Thu Aug 28 13:45:06 2025

## Submitted Code:

```
import math import statistics def calculate_area(radius: float) -> float:
    """Calculate the area of a circle given its radius.""" if radius <= 0: return 0.0
    return math.pi * radius * radius def calculate_statistics(numbers: list[int]) ->
dict: """Return basic statistics (mean, median, variance).""" if not numbers: return
{"mean": 0, "median": 0, "variance": 0} return { "mean": statistics.mean(numbers),
"median": statistics.median(numbers), "variance": statistics.variance(numbers), }
class Student: """Represents a student with grades.""" def __init__(self, name: str,
grades: list[int]): self.name = name self.grades = grades def average_grade(self) ->
float: """Return the student's average grade.""" if not self.grades: return 0.0
    return statistics.mean(self.grades) def performance(self) -> str: """Classify
student performance based on average grade.""" avg = self.average_grade() if avg >=
75: return "Excellent" elif avg >= 50: return "Good" else: return "Needs
Improvement"
```

## AI Review:

This is a placeholder AI review. Integrate your real analysis output here.