Assignment 2

Task 9

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**Answer**

To estimate the number of defects in the real version of BAT, we can base our calculation using defects found in the redacted code. We have the following information from the redacted version of the BAT code:

- business\_logic.py: 2 defects found in 227 lines of code.

- search.py: 1 defect found in 85 lines of code.

Next, we can calculate the defect rates for both files separately.

- business\_logic.py defect rates: 2 defects per 227 lines of code = 0.0088

- search.py defect rates: 1 defect per 85 lines of code = 0.0118

Since we have two defect rates from the separate files, we should compute the average defect rate:

- Average defect rate: (0.0088+0.0118)/2 = 0.0103

The real version of BAT has 9842 lines of code. Using the average defect rate, we can estimate the total number of defects:

- Estimated total number of defects: 9842\*0.0103 = 101.3726

Based on the defect rates found in the redacted version of the BAT code, we would expect the real version of BAT with 9842 lines of code to contain approximately 101 defects.