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Design and Analysis of Algorithm Tutorial 02

Analyze the running time of the following program fragments, finding **Operation Count** & **Step count**.

```
1
                          j ← 1
                         while j \le 10
                                j \leftarrow j + 1
                                 for i \leftarrow 0 to n
                                        a \leftarrow a + 1
2
                        a ←10
                        for i \leftarrow 0 to n
                              for j \leftarrow 1 to 10
                                   a \leftarrow a + 1
3
                               sum \leftarrow 0
                             for i \leftarrow n down to 0
                                  sum = sum + 1
                              i \leftarrow 1
                              While i \le n
                                  sum = sum + 1
                                   i \leftarrow i + 1
```