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Description: Assignment3 CSCI262

**Execution Requirements:**

1. Python 3.10.5
2. Python Pandas library is required if not installed type this command in terminal: ‘pip install pandas’

**Execution of program:**

1. Open terminal in the directory
2. Run ‘python IDS.py Events.txt Stats.txt {Days}’



**Activity simulation Engine:**

1. **Processing of data and create logs**Text

   Description automatically generated

* Check for consistencies between two files and misconfigurations terminates the program.
* Event values for each days is generated independently using random.normalvariate().
* Standard deviation and mean are calculated using python’s statistics library.

1. **default\_baseline.txt**

Table

Description automatically generated

1. **default\_baseline\_total.txt**

Graphical user interface, table

Description automatically generated

1. **default\_baseline\_total\_stats.txt**

Text

Description automatically generated with medium confidence

**Alert Engine**

1. **Users choose to exit program or enter live data file in txt.**



1. **User enters number of days.**



1. **Processing of data and create logs.**

A screenshot of a computer

Description automatically generated with medium confidence

1. **live\_baseline.txt**

Table

Description automatically generated

1. **live\_baseline\_total.txt**

Table

Description automatically generated

1. **live\_baseline\_total\_stats.txt**

Graphical user interface, text, application, table

Description automatically generated

1. **generating anomaly detection**

Text

Description automatically generated

Either good or bad. Good means safe. Bad means unsafe. User prompt to key in live data file or exit program.