Programming Assignment Testing

More Network Traces

We will release two more traces for you to test your implementation:

- `packet-trace-2.csv` : ~5.2 M packets
- `packet-trace-3.csv` : ~1M packets

Edit to `count_min.py`

```python
def add_item(self, packet_flow, packet_len):
    """ Update sketch for the current packet in stream

    Args:
        packet_flow : Tuple of (Source_IP, Destination_IP, Source_Port, Destination_Port, Protocol)
        packet_len: Integer value of packet length
    """



    """ YOUR CODE HERE
    TODO: Implement the sketch update algorithm
    """

    assert (asizeof.asizeof(self.sketch)+asizeof.asizeof(self.auxiliary_storage))/(1024**2) < 1, "Sketch Size is not less than 1 Megab
```

Statement slowing down the code. **Can be removed**.

Heavy Hitters - Modification

- The flow size for heavy hitters should be considered in terms of the number of packets in the flow.
- **Not** the cumulative packet length as stated in the earlier assignment document.
- The shared test cases consider the heavy hitters in terms of the number of packets.

Guidelines

- ✓Feel free to use all of the allocated 1 Megabyte space for sketch.
- ✓Do note we **can** test for larger traces:
  - Sketches are expected to be robust to larger traces
  - *Some* degradation in accuracy expected
- ✓Releasing new `test.py` to test against a “par” baseline.

New `test.py`

- Allows you to test your code against a ``**par**'' baseline
- Usage:

  ```
  python test.py <trace-name>
  ```

- We share our baseline error bounds in `constants.py`.

NOTE:

- Test cases are provided to ensure basic correctness.
- Should not be considered as sole determinant of sketch quality.