Evaluating Display Advertising Campaigns

Question 1

```
Answer 1:
{1: 0.88941, 2: 0.05894, 3: 0.0, 4: 0.05139, 5: 0.00026}

b)

Answer 2:
{1: 0.0, 2: 0.0, 3: 0.0, 4: 0.0, 5: 1.0}

c)

Answer 3:
{1: 0.14638, 2: 0.25268, 3: 0.04694, 4: 0.13436, 5: 0.41964}
```

Question 2 (Optional for Extra Credit):

Campaigns with lower CTR do tend to have higher post-click volume. This is because campaigns with lower CTR are generally more targeted towards a particular segment(s). Therefore, the appeal of the campaign is not high amongst everyone i.e. lower CTR but they do appeal specifically to certain segment(s) and thus have a higher post-click volume.

Question 3 (Optional for Extra Credit):

According to me, the ordering would not remain consistent between the 2 results. I strongly feel that it depends more on data distribution and how you are estimating your priors. The more inaccurate our priors the more displaced our bayesian posterior would be. Therefore, it highly depends on these 2 factors.