Lab 6

RECAP

**Questions (only one correct answer)**

Q1. John Maynard Keynes (n.d. apud Davidson-Pilon, 2016, p. 12) said the following, idea greatly applicable to Bayesian thinking:

1. ”When the facts change, I change my mind. What do you do, sir?”
2. ”The unemployment rate should be very small, controlled by public organizations.”

Q2. A Bayesian function returns (see Davidson-Pilon, 2016, p. 12):

1. An estimate (e.g. a sample average);
2. Probabilities.

Q3. A Bayesian would return the following for the question ”Often my code has bugs. My code passed all X tests; is my code bug-free?” (see Davidson-Pilon, 2016, p. 12):

1. ”Yes”;
2. ”Yes, with probability 0.8”.

Q4. The following sentence is: ”Bayesian inference merely uses it to connect the posterior probability P(A) with an updated prior probability P(A|X)” (see Davidson-Pilon, 2016, p. 14):

1. True
2. False

Q5. Which of the following variables can be model as a continuous random variable (which ”can take on arbitrarily exact values” [Davidson-Pilon, 2016, p. 18]):

1. Movie ratings;
2. Speed.

Q6. The following sentence is: ”Observed random variables are defined via likelihood distributions, while unobserved random variables are defined via prior distributions” (Pymc.io, n.d.):

1. True
2. False

Cited works:

Davidson-Pilon. (2016). *Bayesian Methods for Hackers: Probabilistic Programming and Bayesian Inference*. Crawfordsville, United States: Addison-Wesley.

Pymc.io. (n.d.). API quickstart. Retrieved from https://docs.pymc.io/notebooks/api\_quickstart