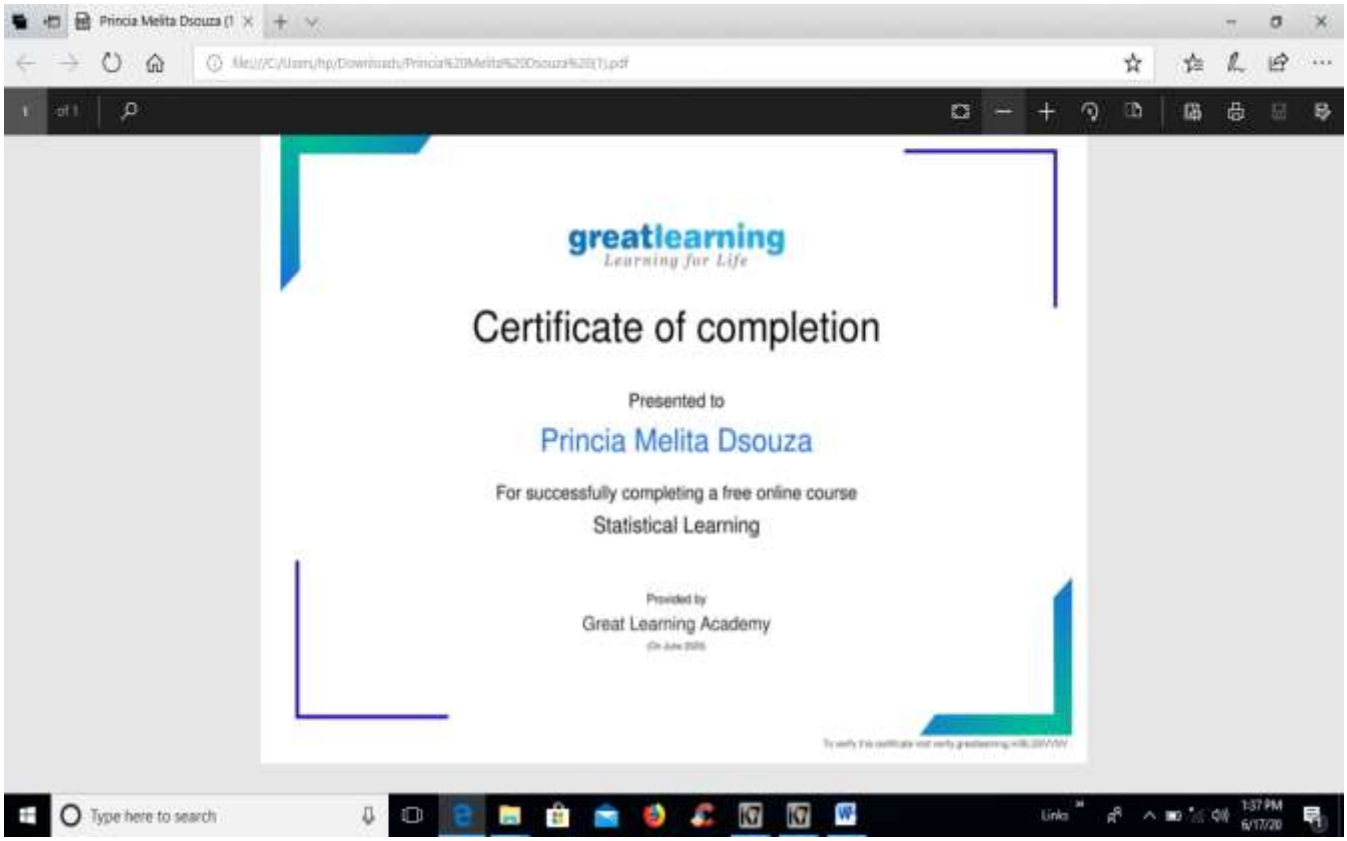
DAILY ASSESSMENT FORMAT

Date:	**17-06-2020**	**Name:**	**PRINCIA MELITA DSOUZA**
Course:	**Great learning**	**USN:**	**4AL17EC075**
Topic:	**Statistical learning**	**Semester & Section:**	**6TH B**
Github Repository:	**MELITA-1999**		

FORENOON SESSION DETAILS

Image of session



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Probability an Introduction.

Probability is the science of how likely events are to happen. At its simplest, it's concerned with the roll of a dice, or the fall of the cards in a game. ... Probability is used, for example, in such diverse areas as weather forecasting and to work out the cost of your insurance premiums.

Basic Probability: Some Concepts

The probability that an event will occur is a number between 0 and 1. In other words, it is a fraction. It is also sometimes written as a percentage, because a percentage is simply a fraction with a denominator of 100. For more about these concepts, see our pages on Fractions and Percentages. An event that is certain to occur has a probability of 1, or 100%, and one that will definitely not occur has a probability of zero. It is also said to be impossible.

Rules of probability

- Two events are **mutually exclusive** or **disjoint** if they cannot occur at the same time.
- The probability that Event A occurs, given that Event B has occurred, is called a **conditional probability**. The conditional probability of Event A, given Event B, is denoted by the symbol P(A|B).
- The **complement** of an event is the event not occurring. The probability that Event A will not occur is denoted by P(A').
- The probability that Events A and B *both* occur is the probability of the **intersection** of A and B. The probability of the intersection of Events A and B is denoted by P(A ∩ B). If Events A and B are mutually exclusive, P(A ∩ B) = 0.
- The probability that Events A or B occur is the probability of the **union** of A and B. The probability of the union of Events A and B is denoted by P(A ∪ B) .
- If the occurrence of Event A changes the probability of Event B, then Events A and B are **dependent**. On the other hand, if the occurrence of Event A does not change the probability of Event B, then Events A and B are **independent**.

Bayesian theory calls for the use of the posterior predictive distribution to do predictive inference, i.e., to predict the distribution of a new, unobserved data point. That is, instead of a fixed point as a prediction, a distribution over possible points is returned. Only this way is the entire posterior distribution of the parameter(s) used. By comparison, prediction in frequentist statistics often involves finding an optimum point estimate of the parameter(s)—e.g., by maximum likelihood or maximum a posteriori estimation (MAP)—and then plugging this estimate into the formula for the distribution of a data point. This has the disadvantage that it does not account for any uncertainty in the value of the parameter, and hence will underestimate the variance of the predictive distribution.(In some instances, frequentist statistics can work around this problem. For example, confidence intervals and prediction intervals in frequentist statistics when constructed from a normal distribution with unknown mean and variance are constructed using a Student's t-distribution. This correctly estimates the variance, due to the fact that (1) the average of normally distributed random variables is also normally distributed; (2) the predictive distribution of a normally distributed data point with unknown mean and variance, using conjugate or uninformative priors, has a student's t-distribution. In Bayesian statistics, however, the posterior predictive distribution can always be determined exactly—or at least,

to an arbitrary level of precision, when numerical methods are used.)Both types of predictive distributions have the form of a compound probability distribution (as does the marginal likelihood). In fact, if the prior distribution is a conjugate prior, and hence the prior and posterior distributions come from the same family, it can easily be seen that both prior and posterior predictive distributions also come from the same family of compound distributions. The only difference is that the posterior predictive distribution uses the updated values of the hyperparameters (applying the Bayesian update rules given in the conjugate prior article), while the prior predictive distribution uses the values of the hyperparameters that appear in the prior distribution.

Date:	**17-06-2020**	**Name:**	**PRINCIA**
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AFTERNOON SESSION DETAILS

Image of session

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MySQL is a free, open source RDBMS (relational database management system) that utilizes SQL (structured query language). SQL is a language used to add, access and manage database content. The language is known for its proven reliability, quick processing, flexibility and ease of use. MySQL is a specialized database software program that makes storing and retrieving data as efficient as possible.A database program is essentially computer software designed to manage loads of information. The program stores the data in such a way that retrieving information becomes quick and easy. For example, if a database stores a list of buyers and their addresses, typing in and accessing data about the one millionth buyer would take the same time as retrieving information about the first customer on the list.SQL is a computer language supported by several database software programs. It makes accessing database data for other programs easy. Programs that need database software for handling low-level task of managing information would simply use SQL to transmit instructions.