**DAILY ASSESSMENT FORMAT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date:** | **22-05-2020** | **Name:** | **Bhavith** |
| **Course:** | **TCS ION** | **USN:** | **4AL17EC009** |
| **Topic:** | **Artificial Intelligence** | **Semester & Section:** | **6Th,A** |
| **Github Repository:** | **Bhavith-Online-Courses** |  |  |

|  |
| --- |
| **FORENOON SESSION DETAILS** |
| **Image of session**  **PSX_20200520_181532** |
| **Report – Report can be typed or hand written for up to two pages.**  **Artificial Intelligence:**   * **Artificial intelligence (AI) is wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.** * **AI is an interdisciplinary science with multiple approaches, but advancements in [machine learning](https://builtin.com/machine-learning) and deep learning are creating a paradigm shift in virtually every sector of the tech industry**.   **HOW DOES ARTIFICIAL INTELLIGENCE WORK?**   * **AI works by combining large amounts of data with fast, iterative processing and intelligent algorithms, allowing the software to learn automatically from patterns or features in the data.** * **Machine learning automates analytical model building.** * **Many AI algorithms are capable of learning from data; they can enhance themselves by learning new [heuristics](https://en.wikipedia.org/wiki/Heuristic_(computer_science)" \o "Heuristic (computer science)) (strategies, or "rules of thumb", that have worked well in the past), or can themselves write other algorithms.** * **Some of the "learners" described below, including Bayesian networks, decision trees, and nearest-neighbor, could theoretically, (given infinite data, time, and memory) learn to approximate any [function](https://en.wikipedia.org/wiki/Function_(mathematics)" \o "Function (mathematics)), including which combination of mathematical functions would best describe the world[*[citation needed](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*].** * **These learners could therefore, derive all possible knowledge, by considering every possible hypothesis and matching them against the data.** * **In practice, it is almost never possible to consider every possibility,** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:** | **22-05-2020** | **Name:** | **Bhavith** | |
| **Course:** | **Python** | **USN:** | **4AL17EC009** | |
| **Topic:** | **Data Analysis,Numpy** | **Semester & Section:** | **6TH,A** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session**  **Screenshot (92)** | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Data Analysis:**   * **Data analysis is a process of inspecting, [cleansing](https://en.wikipedia.org/wiki/Data_cleansing" \o "Data cleansing), [transforming](https://en.wikipedia.org/wiki/Data_transformation" \o "Data transformation) and [modeling](https://en.wikipedia.org/wiki/Data_modeling" \o "Data modeling) [data](https://en.wikipedia.org/wiki/Data" \o "Data) with the goal of discovering useful information, informing conclusions and supporting decision-making.** * **Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, and is used in different business, science, and social science domains.** * **In today's business world, data analysis plays a role in making decisions more scientific and helping businesses operate more effectively.** * **[Data mining](https://en.wikipedia.org/wiki/Data_mining" \o "Data mining) is a particular data analysis technique that focuses on statistical modeling and knowledge discovery for predictive rather than purely descriptive purposes, while [business intelligence](https://en.wikipedia.org/wiki/Business_intelligence" \o "Business intelligence) covers data analysis that relies heavily on aggregation, focusing mainly on business information.** * **In statistical applications, data analysis can be divided into [descriptive statistics](https://en.wikipedia.org/wiki/Descriptive_statistics" \o "Descriptive statistics), [exploratory data analysis](https://en.wikipedia.org/wiki/Exploratory_data_analysis" \o "Exploratory data analysis) (EDA), and [confirmatory data analysis](https://en.wikipedia.org/wiki/Statistical_hypothesis_testing" \o "Statistical hypothesis testing) (CDA).** * **EDA focuses on discovering new features in the data while CDA focuses on confirming or falsifying existing [hypotheses](https://en.wikipedia.org/wiki/Hypotheses" \o "Hypotheses).** * **[Predictive analytics](https://en.wikipedia.org/wiki/Predictive_analytics" \o "Predictive analytics) focuses on application of statistical models for predictive forecasting or classification, while [text analytics](https://en.wikipedia.org/wiki/Text_analytics" \o "Text analytics) applies statistical, linguistic, and structural techniques to extract and classify information from textual sources, a species of [unstructured data](https://en.wikipedia.org/wiki/Unstructured_data" \o "Unstructured data). All of the above are varieties of data analysis.** | | | |