**Big Data Analytics Assignment Question**

1. **Financial (Credit Risk Modeling, Fraud Detection)**

Credit Risk Modeling: Banking and Financial institutions use credit risk modeling to score credit applications and predict if a borrower will default or not in the future. Big data systems can be used for building credit models.​

1. **Web (Web Analytics, Content Recommendation)**

Content Recommendation: Such applications can leverage big data systems for recommending new content to the users based on user preferences and interests.

1. **Environment** (Weather Monitoring, Air Pollution Monitoring, Noise Pollution Monitoring, Forest Fire Detection, River Floods Detection)

4**.Air Pollution Monitoring:** Air pollution monitoring systems can monitor the emission of harmful gases by factories and automobiles using gaseous and meteorological sensors. The collected data can be analyzed to make informed decisions on pollution control approaches.

1. **Healthcare (Epidemiological Surveillance, Real-time health monitoring)**

Real-time health monitoring: Big data systems for real-time data analysis can be used for the analysis of large volumes of fast-moving data from wearable devices and other in-hospital or in-home devices, for real-time patient health monitoring and adverse event prediction.

1. **Internet of Things (Intrusion Detection, Smart Parkings, Smart Irrigation)**

Intrusion Detection: Intrusion detection systems use security cameras and sensors (such as PIR sensors and door sensors) to detect intrusions and raise alerts.

1. **Smart Parking:** In smart parking, sensors are used for each parking slot, to detect whether the slot is empty or occupied. This information is aggregated by an on-site smart parking controller and then sent over the Internet to a cloud-based big data analytics backend.
2. **Logistics & Transportation (Shipment Monitoring, Route Generation & Scheduling)**

Shipment Monitoring: containers carrying fresh food products can be monitored to detect spoilage of food. Shipment monitoring systems use sensors such as temperature, pressure, humidity, for instance, to monitor the conditions inside the

1. **Customer Recommendations**: Big data systems can be used to analyze customer data (such as demographic data, shopping history, or customer feedback) and predict the customer preferences.
2. **Production Planning and Control:** Production planning and control systems measure various parameters of production processes and control the entire production process in real-time. These systems use various sensors to collect data on the production processes. Big data systems can be used to analyze this data for production planning and identifying potential problems.