### **Assignment **3****

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**Course Name: Scripting**

**Course Code: COSC 1104-01**

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**Part 1: Identifying the Problem**

**Cloud Cost Optimization Tool**

**Scenario:**

Because of the fast development of cloud-based administrations, cloud cost administration has become progressively significant for organizations, all things considered. Associations might find it challenging to follow and upgrade cloud foundation costs across various administrations, like handling, stockpiling, systems administration, and content conveyance. Deficient observing or an absence of enhancement could prompt surprising and huge cloud costs. Along these lines, organizations need a strong answer for make due, survey, and improve their cloud spending.

In this occasion, the cloud cost improvement device means to tackle the issue of following and evaluating cloud framework costs across different administrations. With the assistance of this instrument, clients will actually want to enter their cloud charging data, and it will naturally decide the general expense and separate uses into various administrations. The information will be displayed in a pie graph.

The essential objective of the device is to give a direct and compelling method for computing and envision the all out cloud cost from different cloud administrations like EC2, S3, RDS, Lambda, and CloudFront. The instrument ought to have the option to:

1. Input the expense information for each cloud administration.

2. Calculate the absolute cloud cost.

3. Break down the expense as a level of the aggregate.

4. Display this information utilizing a pie graph for simple perception.

**Relevance to Cloud Computing:**  
  
Since it permits organizations to screen their cloud consumptions, this innovation is very appropriate to cloud framework. Organizations habitually utilize a few cloud administrations on the double, in this manner it's fundamental to have the option to follow and limit costs across these administrations. Complex charging components are normal in cloud administrations, making manual expense following testing. Via computerizing this methodology, the apparatus helps clients in going with very much educated decisions in regards to cloud advancement and asset assignment.

Learning Experience:  
  
  
The knowledge I gain by working on these assignment  
  
Foster your reasonable expense streamlining abilities, which are urgent for cloud-based advancement and framework.

Improve my Python abilities, especially in the space of information examination and perception, which are basic for positions in distributed computing and programming advancement.

**Libraries and Tools:**

* matplotlib: This library will be used to visualize the cost breakdown in a pie chart.

**Difficulty:**

This task is a brilliant chance to work on working with Python's document taking care of, information representation, and essential programming ideas due to its somewhat difficult nature. By utilizing this instrument, understudies will have a more profound comprehension of how cloud costs are determined and broke down, setting them up for expected genuine situations.

**Part 2 :**