DAILY ONLINE ACTIVITIES SUMMARY

Date:	**11/07/2020**	**Name:**	**Prathiksha**
Sem & Sec	**8th sem & B sec**	**USN:**	**4AL16CS070**

Online Test Summary

Subject	**-**		
Max. Marks	**-**	**Score**	**-**

Certification Course Summary

Course	**Introduction to Data Science in Python.**		
Certificate Provider	**Coursera**	**Duration**	**4 weeks**

Coding Challenges

Problem Statement:

1. **Java Program To Calculate CGPA Percentage.**

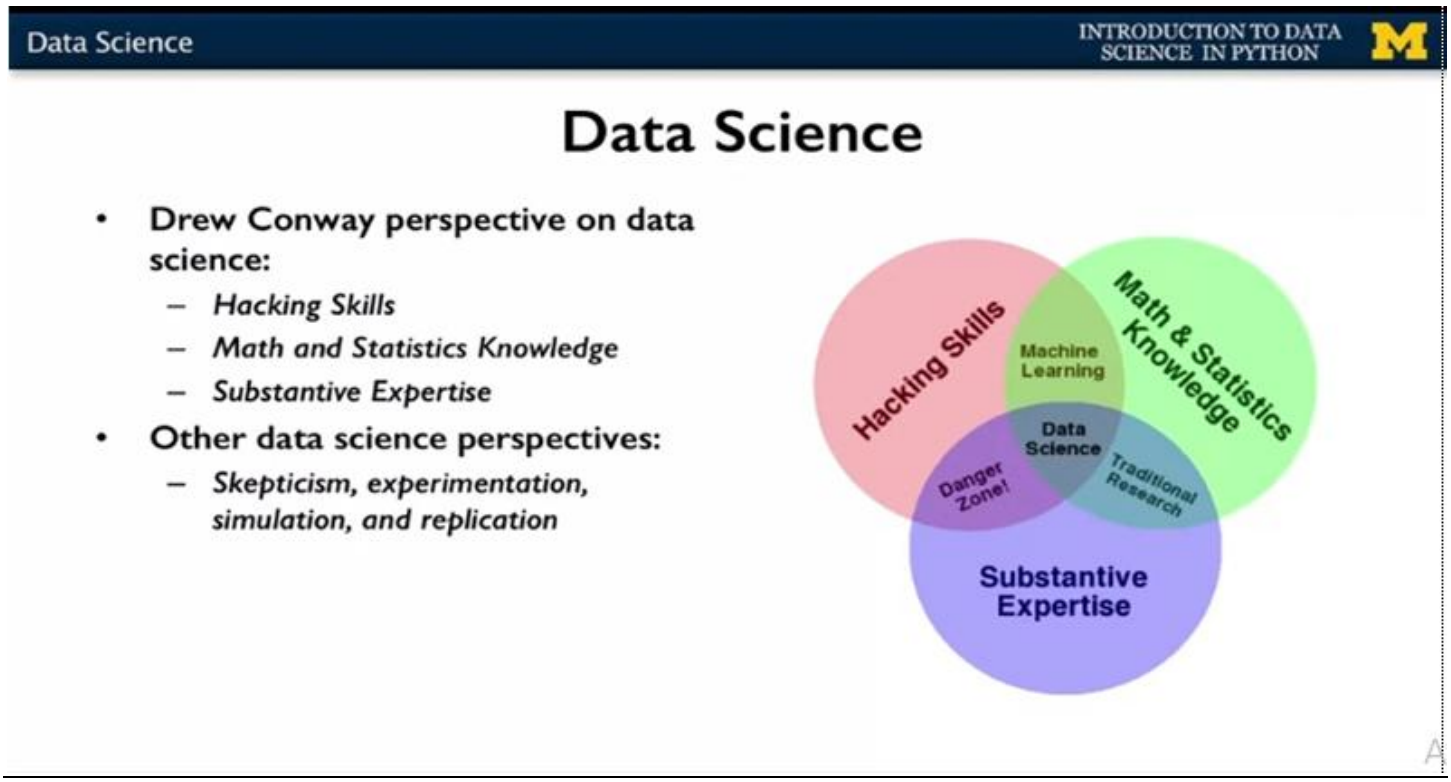
Status: Solved

Uploaded the report in Github	**Yes**
If yes Repository name	**Prathiksha**
Uploaded the report in slack	**Yes**

Online Test Details:

--

Certification Course Details:



coursera

Introduction to Data Science in Python > Week 1 > Data Science

Prev | Next

Python Fundamentals

- **Video:** Introduction to Specialization — 3 min
- **Reading:** Syllabus — 10 min
- **Reading:** Help us learn more about you! — 10 min
- **Video:** Data Science — 7 min
- **Reading:** 50 years of Data Science, David Donoho (optional) — 1h 30m
- **Video:** The Coursera Jupyter Notebook System — 3 min
- **Reading:** Notice for Auditing Learners: Assignment Submission — 10 min
- **Notebook:** Week 1 Lectures Jupyter Notebook
- **Video:** Python Functions — 8 min
- **Video:** Python Types and Sequences — 8 min
- **Video:** Python More on Strings — 3 min
- **Video:** Python Demonstration: Reading and Writing CSV files — 3 min
- **Video:** Python Dates and Times — 2 min
- **Video:** Advanced Python Objects, map() — 5 min
- **Video:** Advanced Python Lambda and List Comprehensions — 2 min
- **Video:** Advanced Python Demonstration: The Numerical Python Library (NumPy) — 7 min
- **Quiz:** Week One Quiz — 12 questions

Data Science

Save Note | Discuss | Download

English

Help Us Translate

0:08 Interest in data science is at an all time high, and really has exploded in popularity in the last couple of years. A fun way to see this is to hit up the Google Trends website. Google Trends shows search keyword information over time. We could see that the term 'data science' is massively popular, really all across the globe.

0:28 We can also see that related queries include topics like python. And we can even see certain tool kits that we'll be teaching in this course. For instance, here's the trend for python pandas, which is the focus of module two and three in this course.

0:43 Before we jump in to a discussion of data science, I'd like to take a moment and have you reflect on what you think data science is, and why you came to this course to explore. If someone you ran into asked you what data science was all about, what would you tell them?

1:01 The history of data science goes back a little further than 2004, which is where the Google search term history begins. But this, at least, gives a sense for how popular the area is now. I think the popularity of interest in the area comes from the network and data driven society we find ourselves living in. When people think of the term data scientist, they tend to think of Google or Amazon or Facebook, places with big artificial intelligence research teams, and certainly these are some amazing companies who are doing great things with data science.

1:33 But data scientist aren't just limited to careers with tech companies. Almost every company is turning to data science to better understand how to build products, serve customers and leverage new opportunities. And companies aren't the only one. In this first course I will be giving lectures here in the University of Michigan digital innovation greenhouse. Which was a lab within the office of academic innovation. The space is used by a team which includes programmers, behavioral scientists and data scientists who aim to build technologies to support next generation teaching and learning. The background of individuals here is very broad and includes folks with computer science and information degrees, psychology degrees, and law and business degrees. And here they apply data driven methodologies to aid in their discovery, from statistical analysis, machine learning and text mining, to information visualization. And this need for data driven intelligence and skills is growing in companies and organizations throughout the world. Let's start with a look at the roots of the field of data science.

2:37 The techniques and methodologies of data science stem from the fields of computer science and statistics. One of the most well cited diagrams describing the field comes from Drew Conway where he suggested data science is the intersection of hacking skills, math and stats knowledge, and substantial expertise. This diagram might be a bit of an oversimplification, but I think it's a great start. Data science is definitely one of those areas where you ask ten people and get ten different answers.

3:04 One thing that I think is missing from this diagram is the underlining need for the scientific inquiry. You don't necessarily get this for having good hacking skills or math and statistic knowledge. A good data scientist bring skepticism, experimentation,

---

Topic: **Understanding data science**.

Coding Challenges Details:

Program 1:

```
class CGPA
{
  public static void main(String args[])
  {
     Scanner sc=new Scanner(System.in);

     System.out.println("Enter number of subjects");

     int n=sc.nextInt();

     double[] marks=new double[n];

     System.out.println("Enter marks");

     for(int i=0;i<n;i++)
     {
       marks[i]=sc.nextInt();
     }

     double cgpa,sum;

     sum= cgpaCalculation(marks);

     cgpa=sum/n;

     System.out.println("cgpa="+cgpa);

     System.out.println("percantage from cgpa="+cgpa*9.5);

  }

 static double  cgpaCalculation(double marks[])
 {
    double sum=0;

    double grade[]=new double[marks.length];

    for(int i=0;i<marks.length;i++)
    {
      grade[i]=(marks[i]/10) ;
```

```
    }

    for(int i=0;i<marks.length;i++)
    {
       sum+=grade[i];
    }

     return sum;
   }
}
```

Output:
Enter number of subjects
5
Enter marks
100
98
78
48
59
cgpa=7.659999999999999
percantage from cgpa=72.77

output:2
Enter number of subjects
6
Enter marks
90
90
90
90
90
90
cgpa=9.0
percantage from cgpa=85.5