## Practical No. 5B (Batch – T8)

## To design and develop web pages using HTML fundamental and formatting elements

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**Exam seat No: 2019BTECS00086**

**Class and Branch: Third Year CSE**

**Batch: T8**

**Course Code and Course Name: Programming Lab-3(5CS352)**

**Year: 2020-21**

### Problem Statement 1:

Design and develop a static web page using HTML for a Data **Science blog**. Access it locally and in LAN using a web server.

Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from noisy, structured and unstructured data and apply knowledge and actionable insights from data across a broad range of application domains. Data science is related to data mining, machine learning and big data. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" in order to "understand and analyze actual phenomena" with data. It uses techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, information science, and domain knowledge. However, data science is different from computer science and information science. Turing Award winner Jim Gray imagined data science as a "fourth paradigm" of science (empirical, theoretical, computational, and now data-driven) and asserted that "everything about science is changing because of the impact of information technology" and the data deluge.

Data science is an interdisciplinary field focused on extracting knowledge from data sets, which are typically large (see big data), and applying the knowledge and actionable insights from data to solve problems in a wide range of application domains. The field encompasses preparing data for analysis, formulating data science problems, analyzing data, developing data-driven solutions, and presenting findings to inform high-level decisions in a broad range of application domains. As such, it incorporates skills from computer science, statistics, information science, mathematics, information visualization, data integration, graphic design, complex systems, communication and business. Statistician Nathan Yau, drawing on Ben Fry, also links data science to human-computer interaction: users should be able to intuitively control and explore data. In 2015, the American Statistical Association identified database management, statistics and machine learning, and distributed and parallel systems as the three emerging foundational professional communities.

## DATA SCIENCE

**Data Science in Finance - Oct 8, 2021**

Finance Industries are applying Data Science applications to use the Customers' data. So that they can take some important data-driven decisions for designing effective business strategies. The success of the different financial companies from all across the world depends on the use of cutting-edge technologies. Financial Industries are using Data Science applications for effective investments in the market full of competition.

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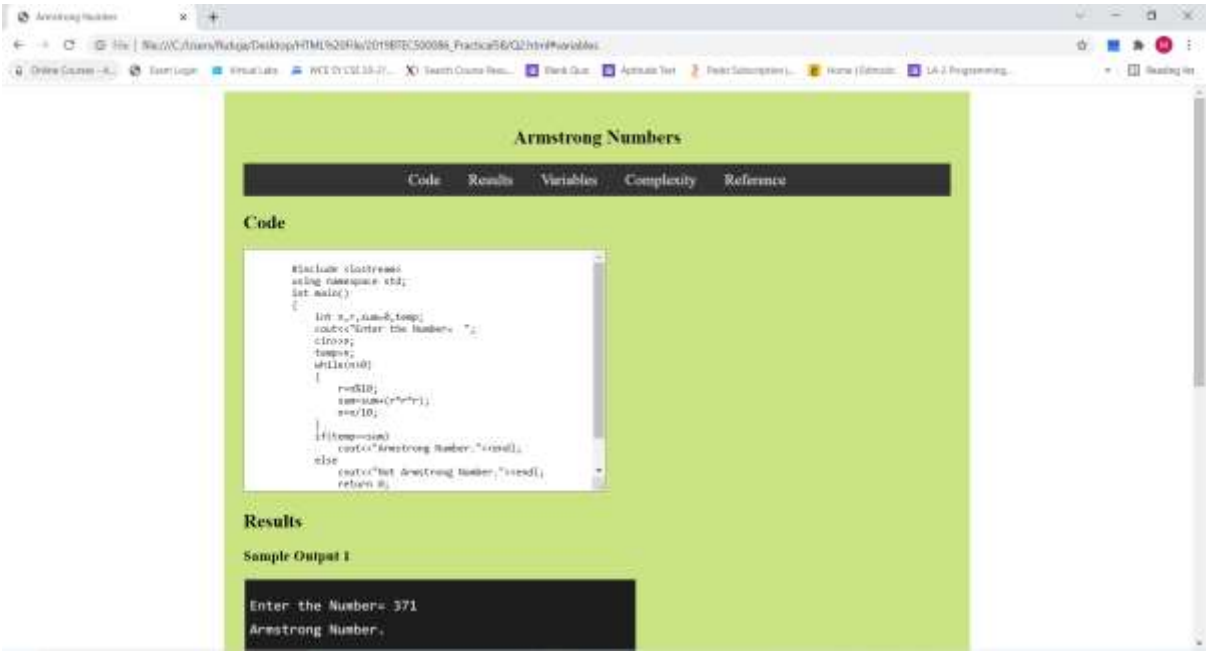
A. To grow in this field, the traders, vendors, investors, etc. need to make the right decision at the right time.
Many Machine Learning algorithms can be used for real-time and predictive analysis. The aim is to analyze a large amount of data available in the market to predict the behavior of the market in the near future. These predictions give an idea about the stock market rates, prices, risks, etc.

B. Another area of Data Science application is Fraud Detection.
Data Science and Artificial Intelligence play a very important role in this. The primary concern of these financial institutions is to provide security to the customers. Otherwise, there may be serious financial losses.

**Problem Statement 2:**
Design and develop a static web page using HTML for following requirements. Access it locally and in LAN using a web server.

It should have following sections:
**1.** Problem Statement: Write a code in any programming language that can find an armstrong number from a given range.
**2.** Code
**3.** Sample Input
**4.** Sample Output
**5.** Variables used in the program
**6.** Complexity



## Armstrong Numbers

Code | Results | Variables | Complexity | Reference

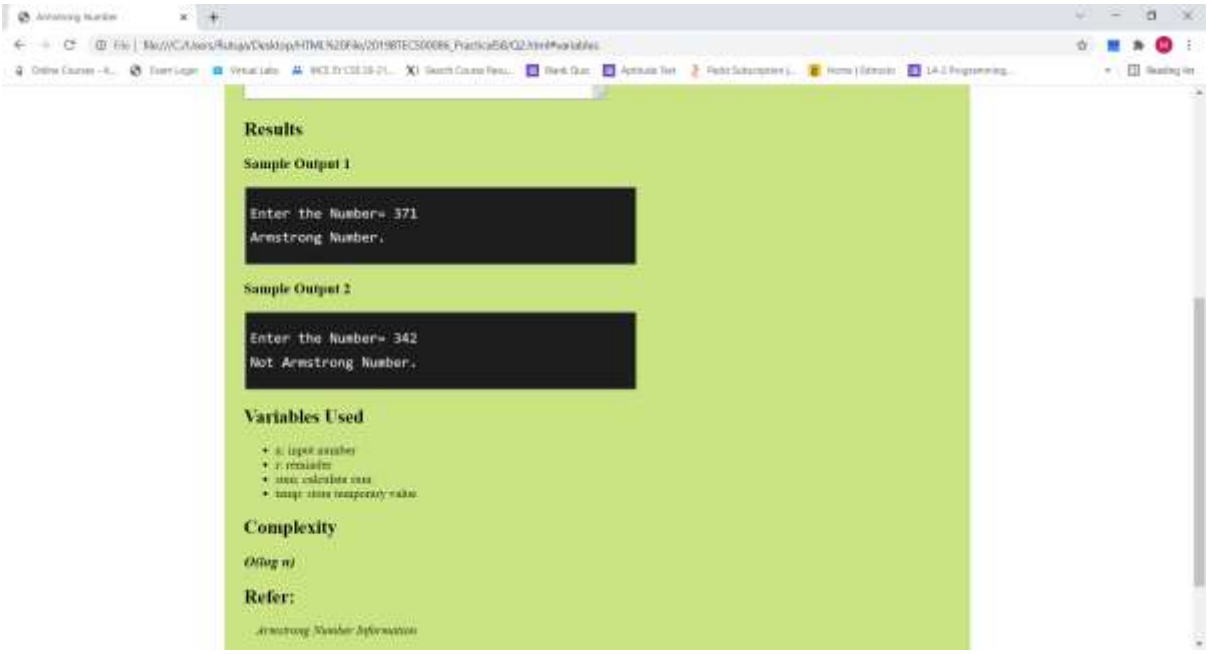
### Code

```
#include <iostream>
using namespace std;
int main()
{
    int n,r,sum=0,temp;
    cout<<"Enter the Number= ";
    cin>>n;
    temp=n;
    while(n!=0)
    {
        r=n%10;
        sum=sum+(r*r*r);
        n=n/10;
    }
    if(temp==sum)
        cout<<"Armstrong Number."<<endl;
    else
        cout<<"Not Armstrong Number."<<endl;
        return 0;
```

### Results

**Sample Output 1**

```
Enter the Number= 371
Armstrong Number.
```



### Results

**Sample Output 1**

```
Enter the Number= 371
Armstrong Number.
```

**Sample Output 2**

```
Enter the Number= 342
Not Armstrong Number.
```

### Variables Used

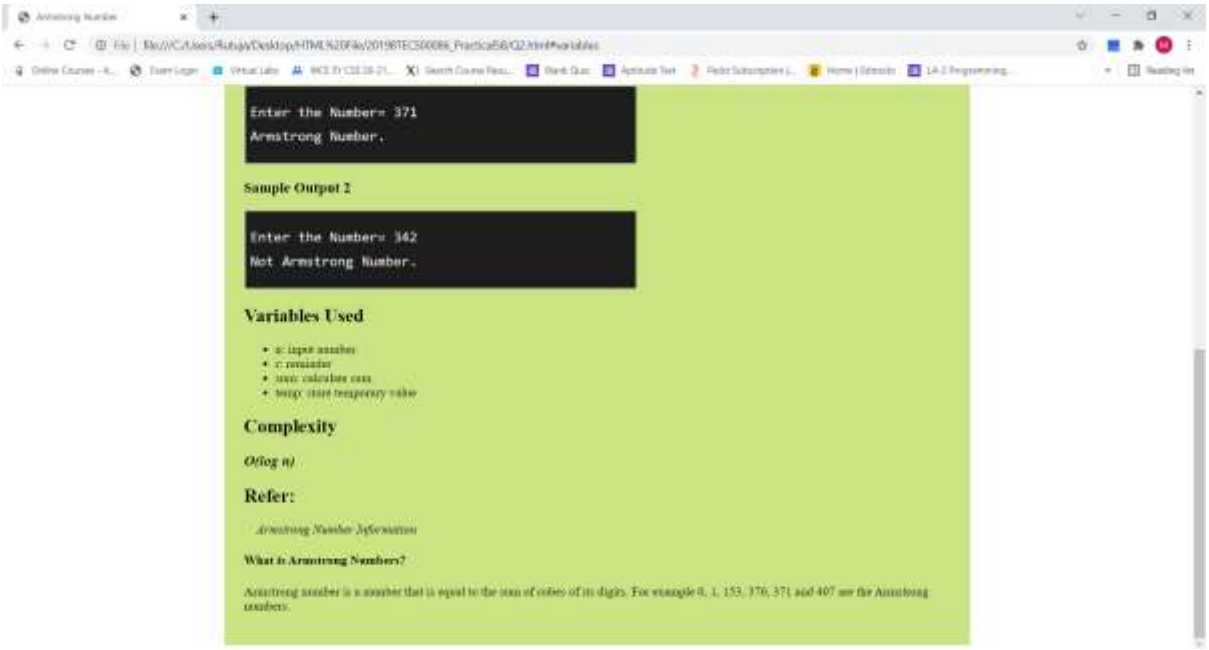
- n: input number
- r: remainder
- sum: calculate sum
- temp: store temporary value

### Complexity

*O(log n)*

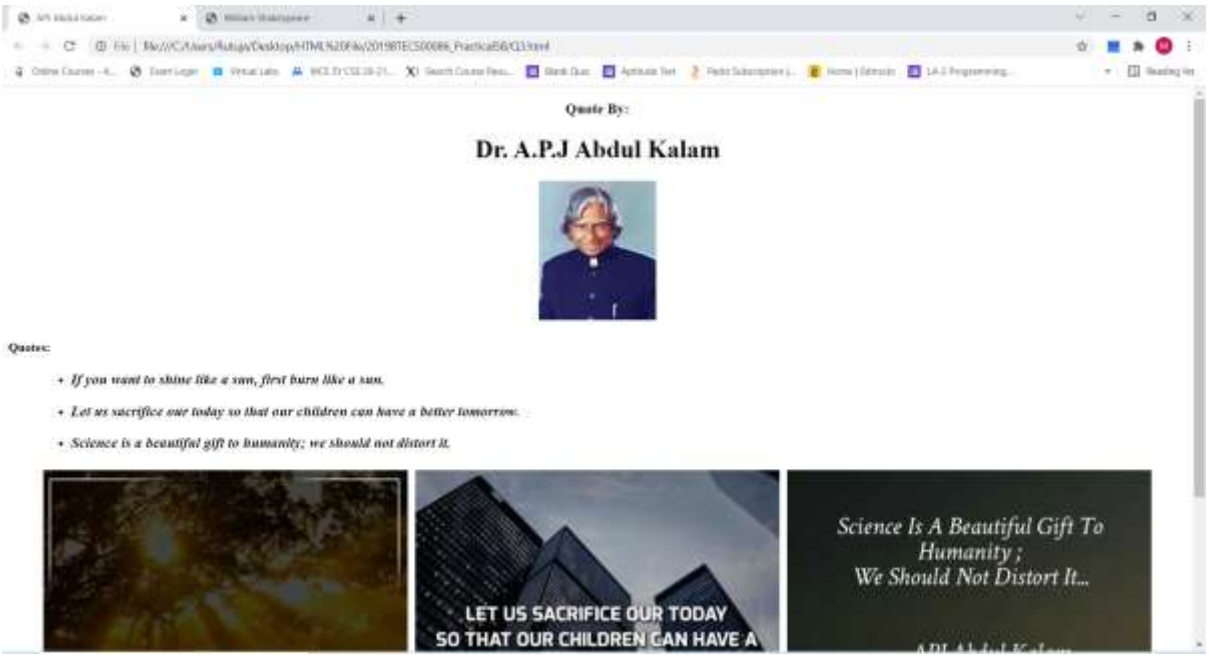
### Refer:

*Armstrong Number Information*




**Problem Statement 3:**
Design and develop a static web page using HTML for following requirements. Access it locally and in LAN using a web server.

It should have following sections:
1. Any three quotes from https://www.brainyquote.com/ with the name of the person who quoted it.



**Quotes:**

- *If you want to shine like a sun, first burn like a sun.*
- *Let us sacrifice our today so that our children can have a better tomorrow.*
- *Science is a beautiful gift to humanity; we should not distort it.*



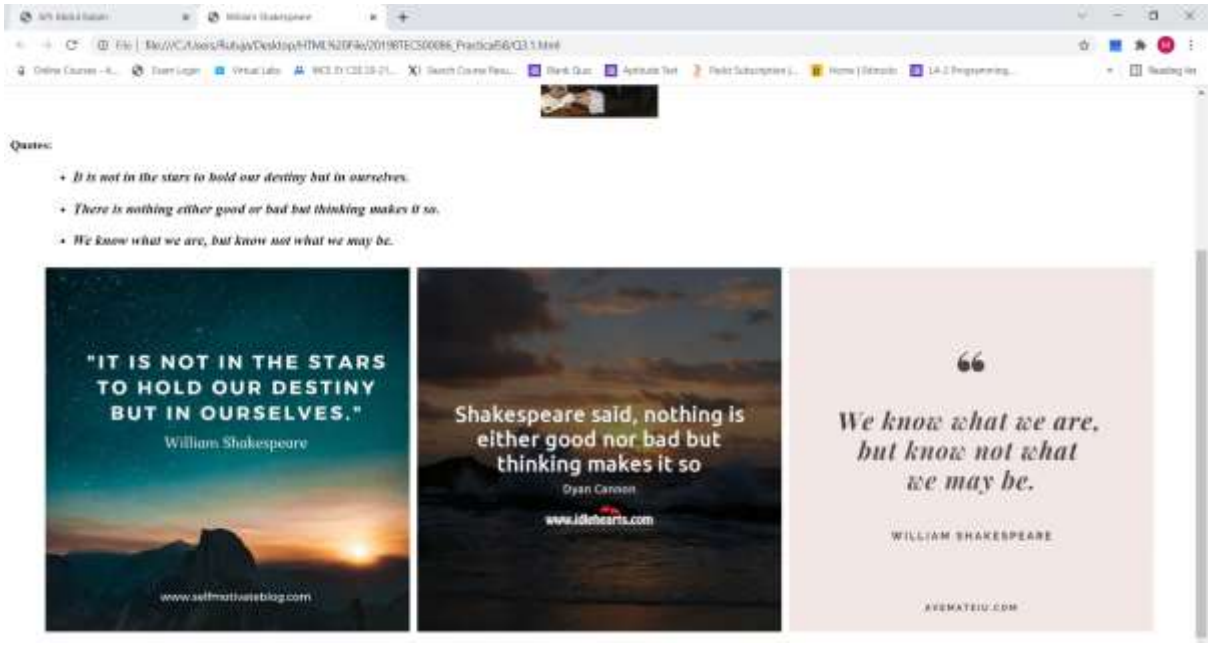

**Quote By:**

## William Shakespeare

**Quotes:**

- *It is not in the stars to hold our destiny but in ourselves.*
- *There is nothing either good or bad but thinking makes it so.*
- *We know what we are, but know not what we may be.*






**GitHub public repository link:** https://github.com/Rutuja2001/PL3/tree/main/Practical%205B