| A picture containing text, clipart  Description automatically generated | **INTRODUCTION TO COMPUTING**  **Assignment 1** | Instructor: Drakhshan Bokhat  Total Marks: 10  Marks Obtained: \_\_\_\_\_\_\_\_ |
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| Roll No: \_\_\_\_\_\_\_\_39\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Mapping CLOs: CLO1** |

**Activity 00a:** What is Computer Science? For each computing innovation, think of a question that you do not know the answer to. The question might be of the form “How does a \_\_\_\_\_\_\_\_ do \_\_\_\_\_\_\_\_?” Often these questions lead to a definition of what computer science is

| Innovation | Question |
| --- | --- |
| Smartphone camera | Is Smartphone camera better than a DSLR camera? |
| Bitcoin | How does Bitcoin make money? |
| Internet Banking | Is Internet Banking good for Business? |
| Language Translation | Is Language Translation helpful for human beings? |
| Defeating a human at chess | Defeating a human at chess is fun? |
| Search engines | Can Search engines be good for study? |
| Face Recognition | What is Face Recognition in psychology? |

**Activity 00b**: The Seven Big Ideas of Computer Science

Facebook is a computing innovation that exemplifies the seven big ideas of computer science. For each big idea in the chart, write how this big idea is related to the invention of Facebook.

| Creativity |
| --- |
| Data |
| Algorithms |
| Programming |
| Internet |
| Impact |
| Abstraction (Creating a user interface) |

**Activity 00c:** Writing an Algorithm

Imagine your teacher says “Everyone, please find a partner for the next activity.” Write a step-by-step algorithm that you would follow to accomplish this, that eventually results in you finding a partner. Your algorithm should handle as many possibilities as you can think of. Imagine that you programmed a robot with human-like qualities to follow this algorithm….it should be detailed enough that the robot could eventually find a partner! In general, try to make your algorithm like a Power Point slide, with a small list of short commands.



If you have time, exchange algorithms with someone else. Then, when everyone is ready, act out the other person’s algorithm. See if the entire class can find a partner this way!