

1)

- a) It is a community based software where people can share their code for others to use
- b) This states how programmers should act as a community, such that they should share their programs so other programmers can use them.
- c) It is company similar to npm whereby it provides open-source software to the world for free and makes money from private services.
- d) It is written in java and it adds character at the start of a string.
- e) It is when the code of a program utilizes another block of code to perform actions within the code. Code can also be dependent on another piece of code even when it does not directly use but uses another code which does use the initial code.

2)

- a) Barton Gellman and Laura Poitras from The Washington Post
- b) In my opinion, these people should be regarded as heroes because everyone should have the right to know that all their online data is being monitored.
- c) Used for greater good:
 - Identify possible terrorist threats
 - Can be used to find lost people by tracking their last activity onlineUsed maliciously:
 - Government knows everything about so you have no privacy
 - There is a possibility that the information could be hacked or leaked to the entire world
- d) Although I did think this was probably the case, I did not actually research on it prior to talking about it in class. Not necessarily, as the government data mining algorithms mainly look for people who may be a harm to the country and since I am not that person or plan to be I see no reason why that should affect me. I believe the only reason the governments monitor everything is so they can keep the people safe.

3)

a)

Benefits for the company:

- It increases their revenue as their advertisement is more effective.
- It reduces the amount of money to spend on trying to understand the buyers and information gathering on what the customer wants

Benefits for the customer:

- In many cases, the customer finds what he was looking for through a targeted advertisement.
- b) The "Do Not Track" movement is a policy that essentially allows users to opt-out of third-party web tracking by websites they do not visit.
- c) \$0.2341

4) a) About 7

- b) This rant shows the reason why some of the biggest companies listed in the previous site could still be hacked and data could be taken from them. The reason behind these data breaches is, when

simply put, down to the laziness of the humans. Laziness plays a factor because as the rant above mentioned, we always use code that just works or is just good enough and we do not care about it actually being secure or elegant. This makes it easy to breach high end security systems. Therefore, in my opinion the problem is more of an ethical one than a technical one. We have the technical skills to make better code but we don't want to put the effort in (similar to doing homework for students)

c) The use of tablets and computer kiosks around the city and in malls to perform various tasks (i.e. self-checkout, maps etc.)- These devices could very easily be hacked and monitored by anyone, meaning it would be a danger in different situations.

5) a) The biggest threat with AI is when the programmers who design the AI make subtle changes to the program that influence the decision making of billions of people because of what the author describes as Fear of Deciding Alone (FODA).

b) From my perspective, as just another person deciding on the situation, I would save the by-stander as he/she has nothing to do with current situation. In my opinion, the passenger would have to sacrifice his life because of his choices and not influence/endanger the life of another person. However, if I, one day, was the passenger in that situation, I would definitely consider hitting the bystander, due to my internal desire to live. Ethically, it would be wrong, but it still wouldn't matter

c) I would most definitely not be, because that would mean that could die any day because of a car taking a bad route or a malfunction that would lead it to crash. It would be morally unjust to program in such a way.

d) I, personally, would consider it due to my ethical positions I stated in the two previous questions. As, the bystander has nothing to do with the situation, then I would be ok to take the hit. However, it does depend on different situations. (ie if a bystander ran in the middle of the road)

e) Personally, there is no right way of making this decision, but the most effective approach would be through both surveys and by consultation with ethicists.

f) They think the biggest threat is that we will eventually not be able to control them and they will take over the human race.