CSC290: Fallacies Worksheet

Conceptual Arguments

Which fallacies (if any) are committed in the arguments below?

Argument	Fallacy & Notes
We shouldn't aim for 100% computer literacy because if everyone is on their computers, there would be no one left to farm.	
Alice thinks that CSC148 lectures were unhelpful. Alice did not go to class at all. Therefore, Alice's arguments are worthless.	
Alice thinks that Mac is better than Windows for programmers. Alice owns large amounts of Apple shares. Therefore we should buy Windows machines.	
I thought you were a good programmer, but your code had a bug in it.	
For the group portion of the midterm you may work in groups of either 4 or 5.	
Bob thinks that learning more than one programming language is useless. Bob's degree is not in computer science. Therefore, Bob's arguments are worthless.	
Bob publishes a study that suggests that smoking does not cause lung cancer. Bob's study is funded by tobacco companies. Therefore smoking causes lung cancer.	

Empirical Arguments

Study Result	Fallacy & Notes
After looking at 1000 different variables, we find a correlation between having an "innie" belly button and liking cabbage.	
In a study published in 1980, researchers interviewed 300 computer science students, and determined that scheduling computing time is a major obstacle for their learning. The department should spend significant resources to resolve this issue.	
Lanny sample 10 students, ask whether they liked the calculus course. He concludes that it is the worst course of all time.	
"Globe and Mail" collects a postal survey asking people in Toronto who they would vote for in the municipal election to predict the election result.	
Jake observes that students who take CSC108 in the fall term receive higher grades. Jake concludes that the course is easier in the fall term.	
A study on employees relationship with their boss is conducted by interviewing employees and asking them, "Do you have any problems with your boss?"	
In WW2, workers examined the distribution of damage in returned aircraft and tried to build more resilient aircraft by reinforcing areas with more damage.	

CSC290: Analyzing Arguments

Read the following excerpt and answer the questions.

I think that memorizing multiplication tables is rubbish. When I say this, it is usually met with general disagreement and in some cases, complete contempt. Typical responses included: (1) There is no other/better way to teach tables, (2) Memorizing tables did me no harm, (3) call me old fashioned but...

So I tried an experiment with a group of primary school teachers. If they thought memorizing tables is such a good thing, I challenged them to memorize the following sentences.

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Fred Davidson lives in Aaron Zion Avenue
Greg Fredson lives in Aaron Clare Avenue
Isaac Davidson lives in Aaron Clare Avenue
Fred Davidson works in Bill Davidson Avenue
...
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It was interesting to see how many people accepted the challenge. The responses of the teachers that tried it and failed to memorize them was the following: I got muddled / scrambled / confused, my head got exhausted, I had no motivation / interest to memorize them, I expected them to be easy to memorize but they weren't, they weren't important to me, I'm too busy.

It was also interesting that many teachers who were in disagreement with me would not do the challenge as they didn't see the relevance of memorizing a load of sentences. In fact the majority of the dissenters would not even attempt to take part!

So, what was the point of memorizing these seemingly random sentences? Before the reveal, I'd like to compare how memorizing tables is very similar to having to memorize those sentences.

When you give children tables, many of them will experience feelings like those expressed by respondents, being muddled, confused, seeing no point, no motivation, etc.

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1. Summarize the author's argument.

2. Is the author's main argument conceptual or empirical?

3. What fallacies, if any, did the author commit?