

# *The Significant Side Effects of Cheating on Programming Assignments*

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# Choices Students Make



**Go out and have fun**



**Debug Code for 10 hours**



# Consequences

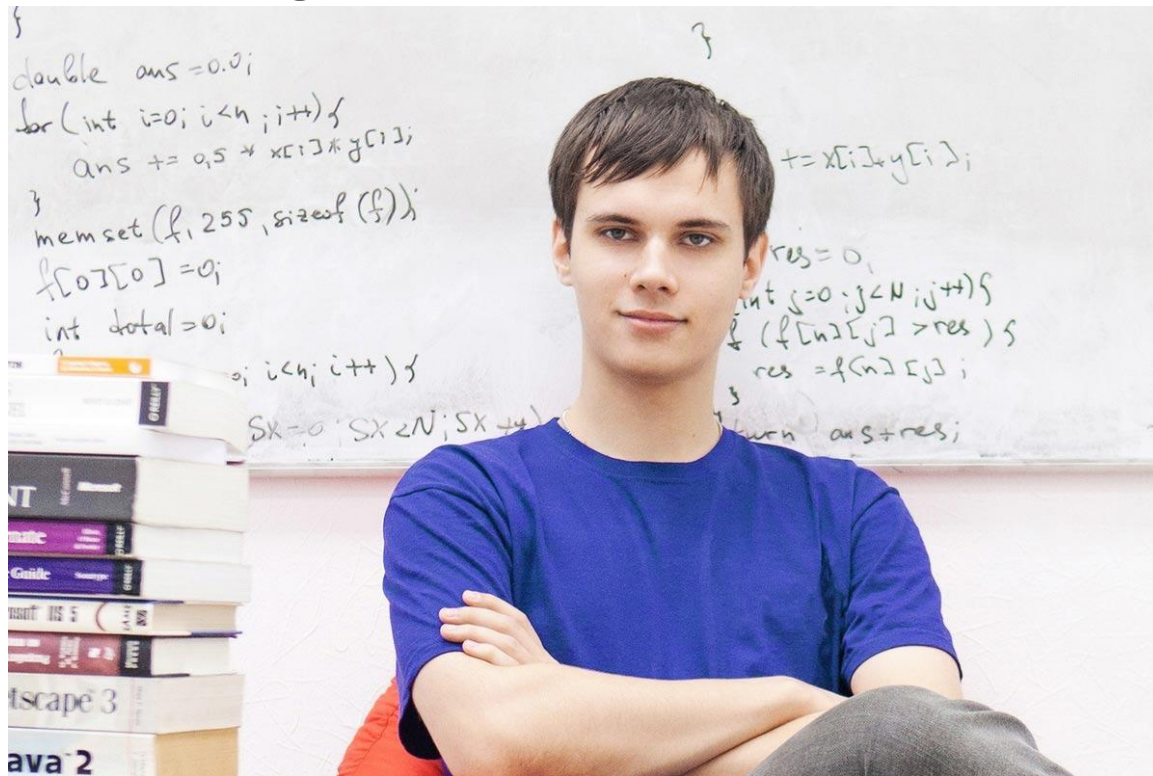
## Partying Student

- Thinks he/she can cram information before exam and be okay
- Doesn't realize that the lack of practice significantly affects ability to write proper code and to debug code.
- Thinks copying code for the assignment isn't a big deal.

## Diligent Student

- Learns how and why behind fundamental topics in computer science
- Has developed brain patterns that allow for creative problem solving and future learning.

# Who writes better code upon graduation?



<http://theduckrabbit.com/2015/10/the-superstar-of-sport-coding/>

# Biggest Side Effect of Graduating Poor Coders

- Buggy Software has caused billions of dollars of loss and loss of life.
  - Therac-25 (1985) – 6 large radiation overdoses
  - Patriot Missile Accident (1991) – 28 deaths
  - Ariane-5 (1996) – cost \$254 million
  - Mars Climate Orbiter (1998) – cost \$327.6 million
  - North East Blackout (2003) - \$10 billion and 11 lives





# Other side effects

- Grades are no longer fair.
- Grades no longer indicate ability.
- The entire degree is devalued.

