

CMSC330 Spring 2016 Quiz #5

Name: _____

Discussion Time:	10am	11am	12pm	1pm	2pm	3pm
TA Name (Circle):	Adam	Anshul	Austin	Ayman	Damien	
	Daniel	Jason	Michael	Patrick	William	

Instructions:

- Do not start this test until you are told to do so!
- You have 15 minutes for this quiz.
- This is a closed book exam. No notes or other aids are allowed.
- For partial credit, show all of your work and clearly indicate your answers.
- Write neatly and erase cleanly. Credit cannot be given for illegible answers.

1) (8 pts) Answer three of the four multiple choice questions.

- a. Which of the following languages is most vulnerable to a buffer overflow exploit?
 - i. Java
 - ii. Ruby
 - iii. C
 - iv. OCaml
- b. If you are using user input as a path to retrieve a file, how can you whitelist the input to avoid exploits?
 - i. Reject input strings that contain problematic characters
 - ii. Delete problematic characters from input strings
 - iii. Escape problematic characters from input strings
 - iv. Only accept paths to existing files
- c. Which of the following is *not* considered a good security practice?
 - i. Limiting user privilege
 - ii. Obfuscating security flaws
 - iii. Sandboxing system components
 - iv. Defaulting to secure fail-safes
- d. Prepared statements are typically used to fight which of following attacks?
 - i. Buffer overflows
 - ii. XSS attacks
 - iii. Rubber-Hose cryptanalysis
 - iv. Command Injection

2) (7 pts) Write a recursive rule called sublist that given a list and two numbers returns the sub list between those indices. See the example for how sublist should function. You may use helper functions and assume proper input.

?- sublist([4,2,3,1],0,0,R). ?-sublist[5,4,7,6],0,2,R). ?-sublist([8,3,7,4,3],1,4,R).
R = [4] R=[5,4,7] R=[3,7,4,3]