Week 12 Tutorial

Memory Allocation

1. How do we get memory when the program is running?

2. In which header file is malloc defined?

3. What type of value does malloc return?

4. What is the type of malloc's parameter ?

5. Write a call to malloc that will return an array of ten character.

Dynamic Array

6. What are the two values in the dynamic array structure?

7. What are the four function that define the dynamic array's interface?

8. How does the dynamic array get the value for it's array?

9. Why do we need to pass new_dynamic_array the address of a dynamic array structure?

10. How do we get a value from a dynamic array?

11. How do we set the value of a dynamic array?

12. How is the size of a dynamic array expended?

13. Why do we need to free the old memory after copying it into the new location?

GDB

14. How do we start GDB to debug a program?

15. What command runs a program in GDB?

16. What command tells you which functions have been called?

17. What program steps into a new line?

18. Which types of errors does gdb help fix (compiler errors or run-time errors)?

19. How do you need to compile a program to use gdb?

20. What gdb command lists ten lines?

21. Which gdb command steps over a function?

22. Which gdb command shows you the value of variables? How do you use it?

23. Which gdb command will stop the program at a particular line?