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## **HPC Lab Basic C Programming Questions**

1 message

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29 July 2024 at 08:56

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- 1. Write a program that declares an integer variable, assigns it a value, and then prints its address using a pointer.
- 2. Create a program that swaps two integers using pointers.
- 3. Declare an integer array, initialize it, and use a pointer to print each element in the array.
- 4. Develop a program that computes the sum of elements in an integer array using a pointer.
- 5. Write a program that takes an array of integers and reverses it using pointers.
- 6. Create a program to find the largest and smallest elements in an array using pointers.
- 7. Write a program that uses a function pointer to call a function that adds two integers.
- 8. Create a menu-driven program where different operations (like addition, subtraction, multiplication, division) are performed using function pointers.
- 9. Write a program to dynamically allocate memory for an array of integers, initialize it with values, and then free the allocated memory.
- 10. Develop a program to dynamically allocate memory for a string, take input from the user, and then print the string.
- 11. Write a program that prints the number of command-line arguments passed to it.
- 12. Create a program that prints each command-line argument on a new line.
- 13. Write a program that prints the number of command-line arguments passed to it.
- 14. Create a program that prints each command-line argument on a new line.
- 15. Write a program that takes a single string from the command line and reverses it.
- 16. Create a program that takes multiple strings from the command line and concatenates them into a single string.
- 17. Develop a program that takes a list of integers from the command line and calculates their average.
- 18. Write a program that checks if the correct number of command-line arguments are provided and prints an error message if not.

- 19. Develop a program that validates whether the command-line arguments are integers and prints an error message for invalid inputs.
- 20. Write a program that prints all the environment variables passed to it.
- 21. Create a program that takes the name of an environment variable from the command line and prints its value.
- 22. Create a program that takes a list of commands from the command line and executes them sequentially.

Regards,

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