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| 1. Write a declaration of an array named weekend containing seven Bool values. Include an initializer that makes the first and last values true; all other values should be false. |
| 2. The Fibonacci numbers are 0, 1, 1, 2, 3, 5, 8, 10..., where each number is the sum of the preceding two numbers. Write a program fragment that declares an array named fib_numbers of length 40 and fills the array with first 40 Fibonacci numbers. |
| 3. Why do array subscripts starts at 0 instead of 1? |
| 4. Define an array. How to initialize one-dimensional array? Explain with suitable examples. |
| 5. Write a C program to sort the given array elements in Ascending order. |
| 6. Write a C program to read N integers into an array A and to find the (i) sum of odd numbers, (ii) sum of even numbers, (iii) average of all numbers. Output the results computed with appropriate headings |
| 7. Write a C program to search an element using linear and binary techniques |
| 8. Write a C program to find the largest element in an array |
| 9. Write a program to convert a given integer into a string which has the binary equivalent of the number. Example: Assuming that an integer is 32-bits long and for the number 5, the resultant string should be "00000000000000000000000000000101" |
| 10. Using arrays, write a program to check whether a given number has repeated digits. Ex: 456754 (has repeated digits) and 3456 (Does not have) |
| 11. Describe the array index out of bound error in context of C array program. |
| 12. Justify the statement: C compiler never check the array index out of bound error. |

13. What do you mean by compile time initialization? Give suitable example of Compile time initialization of C Array.

14. Print all possible combinations of r elements in a given array of size n. Given an array of size n, generate and print all possible combinations of r elements in array. For example, if input array is {1, 2, 3, 4} and r is 2, then output should be {1, 2}, {1, 3}, {1, 4}, {2, 3}, {2, 4} and {3, 4}.

15. Given an array, find any two elements of the given array whose difference is 0.
a = {12,33,44,66,12,9}

16. Given an array, find all the elements of the array whose sum is equal to 100. a = {23,55,66,77,50, 40, 10}

17. Program to find the addition of pair of elements in a given array input: 2 3 4 5 6 7 output: 5 9 13 input: 2 3 4 5 6 output: 5 9 6