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// Attached: HW 2B(1)
// File: HW_2B1.pdf
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//
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//
//
// Program: random numbers in array
//
// Description:
// populate array with random numbers, then find the greatest and smallest
// elements of the array
```

```
#include <cstdlib>
#include <iostream>

int findSmallestElement(const int numbers[]);
int findGreatestElement(const int numbers[]);
```

```
int main() {

    int numbers[10]{};
    int smallest = 0;
    int greatest = 0;
    srand(time(0));
    for (int i = 0; i < 10; i++) {
        numbers[i] = rand() % 100 + 1;
    }

    std::cout << "List of elements:" << '\n';
    for (int i = 0; i < 10; i++) {
        std::cout << numbers[i] << ' ';
    }
    std::cout << '\n';
    smallest = findSmallestElement(numbers);
    std::cout << "Smallest: " << smallest << '\n';
    greatest = findGreatestElement(numbers);
    std::cout << "Greatest: " << greatest << '\n';
    return 0;
}
```

```
// function findSmallestElement finds the smallest element in the array of
// numbers
// Input: array of numbers: numbers
// Output: smallest number in array: returned to main
int findSmallestElement(const int numbers[]) {
    int smallest = numbers[0];
    for (int i = 0; i < 10; i++) {
        if (numbers[i] < smallest) {
            smallest = numbers[i];
        }
    }
}
```

```
|    }
|    return smallest;
}

// function findGreatestElement finds the greatest element in the array of
// numbers
// Input: array of numbers: numbers
// Output: greatest number in array: returned to main
int findGreatestElement(const int numbers[]) {
    int greatest = numbers[0];
    for (int i = 0; i < 10; i++) {
        if (numbers[i] > greatest) {
            greatest = numbers[i];
        }
    }
    return greatest;
}
// output:
// List of elements:
// 42 27 46 72 76 65 91 8 95 67
// Smallest: 8
// Greatest: 95
```