1. .

```c
#include <stdio.h>
void swap(int *x, int *y) {
    int temp = *x;
    *x = *y;
    *y = temp;
}
int main() {
    int num1, num2;
    printf("Enter the first integer: ");
    scanf("%d", &num1);
    printf("Enter the second integer: ");
    scanf("%d", &num2);

    // Displaying numbers before swapping
    printf("Before swapping:\n");
    printf("First integer = %d, Second integer = %d\n", num1, num2);

    // Calling the swap function
    swap(&num1, &num2);

    // Displaying numbers after swapping
    printf("After swapping:\n");
    printf("First integer = %d, Second integer = %d\n", num1, num2);

    return 0;
}
```

input

```
Enter the first integer: 10
Enter the second integer: 20
Before swapping:
First integer = 10, Second integer = 20
After swapping:
First integer = 20, Second integer = 10
```

2. .

```c
/*********************************************************************************/
#include <stdio.h>
int main() {
    int size, i;
    int *ptr;

    // Prompt the user for the size of the array
    printf("Enter the size of the array: ");
    scanf("%d", &size);

    int arr[size]; // Declare the array of the given size
    ptr = arr; // Point ptr to the array

    // Prompt the user to enter the integer values
    printf("Enter %d integers: ", size);
    for(i = 0; i < size; i++) {
        scanf("%d", (ptr + i));
    }

    // Initialize largest and smallest with the first element of the array
    int largest = *ptr, smallest = *ptr;

    // Traverse the array to find the largest and smallest elements
    for(i = 0; i < size; i++) {
        if(*(ptr + i) > largest) {
            largest = *(ptr + i);
        }
        if(*(ptr + i) < smallest) {
            smallest = *(ptr + i);
        }
    }

    // Display the largest and smallest values
    printf("Largest value: %d\n", largest);
    printf("Smallest value: %d\n", smallest);

    return 0;
}
```

input

```
Largest value: 5
Smallest value: 1
```

3. (Skip)

4. .

```c
#include <stdio.h>

void print_array(int *arr, int size) {
    int i;
    for (i = 0; i < size; i++) {
        printf("%d ", *(arr + i));
    }
    printf("\n");
}

int main() {
    int arr[] = {1, 2, 3, 4, 5};
    // Modification: Initialize ptr to point to the third element of the array
    int *ptr = arr + 2;
    // Call print_array with ptr pointing to the third element and size 3
    print_array(ptr, 3);
    return 0;
}
```

input

```
3 4 5
```