

Arrays as Arguments to Functions in C

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1  int sum_p(int *a, int n) {
2      int i, sum = 0;
3      for (i = 0; i < n; ++i) sum += a[i];
4      return sum;
5  }

7  int sum_a(int a[], int n) {
8      int i, sum = 0;
9      for (i = 0; i < n; ++i) sum += a[i];
10     return sum;
11 }

13 int sum_pa(int (*a)[], int n) {
14     int i, sum = 0;
15     for (i = 0; i < n; ++i) sum += (*a)[i];
16     return sum;
17 }

21 int main() {
22     int x[] = {1,2,3,4,5,6};
23
24     printf("Sum Pointer : %d\n", sum_p(x, 6));
25     printf("Sum Array   : %d\n", sum_a(x, 6));
26     printf("Sum ArrayPtr: %d\n", sum_pa(&x, 6));
27
28     return 0;
29 }

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