

In each exercise make your source code and output readable.

Exercise 1. Write a program, which contains the following functions:

- (a) A function "random_array(a,n,p,q)" which generates pseudorandom number from the range [p,q] for elements of the array a.
 - (b) A function "display_array(a,n)" which displays the values of n elements of the array a on the screen.
 - (c) A function "average_odd(a,n)" which returns the arithmetic average of n elements of the array a that are odd.
- Test the functions in a suitably defined main program. Consider the case when there are no odd number in the array.

Exercise 2. Write a program, which contains the following functions:

- (a) A function "random_array(a,n,p,q)" which generates pseudorandom number from the range [p,q] for elements of the array a.
 - (b) A function "display_array(a,n)" which displays the values of n elements of the array a on the screen.
 - (c) A function "sum_odd(a,n)" which returns the sum of n elements of the array a that are odd.
- Test the functions in a suitably defined main program. Consider the case when there are no odd number in the array.

Exercise 3. Write a program, which contains the following functions:

- (a) A function "random_array(a,n,p,q)" which generates pseudorandom number from the range [p,q] for elements of the array a.
 - (b) A function "display_array(a,n)" which displays the values of n elements of the array a on the screen.
 - (c) A function "swap_integers(a,b)" which interchanges of values a, b.
 - (d) A function "reverse_array(a,n)" which reverses the order of elements of n elements of the array a.
- Test the functions in a suitably defined main program.

Exercise 4. Write a program, which contains the following functions:

- (a) A function "random_array(a,n,p,q)" which generates pseudorandom number from the range [p,q] for elements of the array a.
 - (b) A function "display_array(a,n)" which displays the values of n elements of the array a on the screen.
 - (c) A function "swap_integers(a,b)" which interchanges of values a, b.
 - (d) A function "swap_arrays(a,b,n)" which interchanges of values a, b, where a and b are arrays.
- Test the functions in a suitably defined main program.

Exercise 5. In an array of integers let us store the number of votes cast for the candidate during some election. In a program create an array of percentage of votes casts for each candidate in the election. In a program define the appropriate functions. Test the functions in a suitably defined main program.

Exercise 6. In an array of integers let us store N numbers given by the user. In program define a function that prints the N elements from array in random order. In a program define the appropriate functions. Test the functions in a suitably defined main program.