

C programming Assignment 3

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C programming

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1.

```
the max num is 98
the min num is 11
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```

2.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q2.c -o q2 } ; if ($?) { .\q2 }
the original set of array10
20
30
40
50
the reversed array50
40
30
20
10
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```

3.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q3.c -o q3 } ; if ($?) { .\q3 }
the original array is: 1
2
5
8
4
the sorted array is: 1
2
4
5
8
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```

4.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q4.c -o q4 }
The largest element is: 98
The second largest element is: 89
```

5.

```
Enter number of elements in first sorted array: 1
Enter elements of first array (sorted): 1
Enter number of elements in second sorted array: 1
Enter elements of second array (sorted): 1
Merged sorted array: 1 1
```

6.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "c:\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q6.c -o q6 } ; if ($?) { .\q6 }
Enter a string: download
Length of the string: 8
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

7.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q7.c -o q7 } ; if ($?) { .\q7 }
Enter a string: sameera
Reversed string: areemas
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

8.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q8.c -o q8 } ; if ($?) { .\q8 }
Enter a string: dod
The string is a palindrome.
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

9.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q9.c -o q9 } ; if ($?) { .\q9 }
Enter a string: character
Enter the character to count: a
The character 'a' occurs 2 times in the string.
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

10.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q10.c -o q10 } ; if ($?) { .\q10 }
Enter the first string: sameera
Enter the second string: upadhaya
Concatenated string: sameeraupadhaya
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

11.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "c:\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q11.c -o q11 } ; if ($?) { .\q11 }
Enter number of elements in the array: 3
Enter 3 integers: 1 2 3
Average of the array: 2.00
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

12.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "c:\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q12.c -o q12 } ; if ($?) { .\q12 }
Enter a string: level
1
```

13.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q13.c -o q13 } ; if ($?) { .\q13 }
Enter a non-negative integer: 8
Factorial of 8 is 40320
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> Go
```

14.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q14.c -o q14 } ; if ($?) { .\q14 }
Enter temperature in Celsius: 15
15.00 Celsius = 59.00 Fahrenheit
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

15.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q15.c -o q15 } ; if ($?) { .\q15 }
Enter a string: programming
Enter the character to count: g
The character 'g' occurs 2 times in the string.
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

16.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q16.c -o q16 } ; if ($?) { .\q16 }
Enter the number of elements in the array: 5
Enter 5 integers: 1 2 3 4 5
Reversed array: 5 4 3 2 1
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

17.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q17.c -o q17 } ; if ($?) { .\q17 }
Enter base: 2
Enter exponent (non-negative): 6
2^6 = 64
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

18.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q18.c -o q18 } ; if ($?) { .\q18 }
Enter a positive integer: 16
Prime numbers from 1 to 16: 2 3 5 7 11 13
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

19.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q19.c -o q19 } ; if ($?) { .\q19 }
Enter a positive integer: 2
Factorial series up to 2:
1! = 1
2! = 2
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>
```

20.

```

Enter two integers: 1 2
GCD of 1 and 2 is 1
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

21.

```

Enter a non-negative integer: 4
Factorial of 4 is 24
PS C:\Users\User\Desktop\C\local\assignment-3-a

```

22.

```

PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q2.c -o q2 } ; if ($?) { .\q2.exe }
Enter a non-negative integer n: 4
Fibonacci number F(4) = 3
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

23.

```

Fibonacci number F(4) = 3
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q23.c -o q23 } ; if ($?) { .\q23.exe }
Enter two integers: 1 2
GCD of 1 and 2 is 1
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

24.

```

PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q24.c -o q24 } ; if ($?) { .\q24.exe }
Enter base: 2
Enter exponent (non-negative): 4
2^4 = 16
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

25.

```

PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q25.c -o q25 } ; if ($?) { .\q25.exe }
Enter a string:
Sum of digits: 10
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

26.

```

PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q26.c -o q26 } ; if ($?) { .\q26.exe }
Enter a string: rome
Reversed string: emor
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src>

```

27.

Triangle of 5 rows:

```
*  
**  
***  
****  
*****
```

PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █

28.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q28.c -o q28 } ; if ($?) { .\q28 }  
Enter a non-negative integer: 42  
Binary: 101010  
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```

29.

```
-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q29.c -o q29 } ; if ($?) { .\q29 }  
Enter a string: somuch  
0  
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```

30.

```
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> cd "C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src\" ; if ($?) { gcc q30.c -o q30 } ; if ($?) { .\q30 }  
Enter a string: character  
Enter the character to count: e  
1  
PS C:\Users\User\Desktop\C\local\assignment-3-array-string-and-functions-supadhyaya3348-cloud\src> █
```