Array[1]

PRESENTED BY: SATYA PRAKASH PATEL
EMAIL: SATYAPATEL.IND@GMAIL.COM

char greeting[6] = {'H', 'e', 'l', 'l', 'o', '\0'};
char greeting[] = "Hello";

Index	0	1	2	3	4	5
Variable	H	e	l	l	o	\0
Address	0x23451	0x23452	0x23453	0x23454	0x23455	0x23456

Questions 1-10

You are given a character array word of size n. Write C code that will reverse the order of the characters in this array.

C Program to Print the Alternate Elements in an Array

 C Examples on Finding the Largest and Smallest Numbers in an Array

C Program to Find the Largest Two Numbers in a given Array

C Program to Put Even & Odd Elements of an Array in 2 Separate Arrays

C Program to Insert an Element in a Specified Position in a given Array

C Program to Delete the Specified Integer from an Array

C Program to Cyclically Permute the Elements of an Array

Find the Length of a string without using string.h

C Program to Calculate Sum & Average of an Array

Questions 11-20

C Program to Read an Array and Search for an Element

C Program to accept Sorted Array and do Search using Binary Search

Find unique elements in the array

Find frequency of each elements in the array

Circular right Shift on elements of 1D array by 2 location

Swap min and max element in integer array

Move zeros to end of array

How to check if array contains a duplicate number?

Merge two sorted arrays into one

C Program to Calculate the Sum of the Array Elements using Pointer

Questions 21-30

C Program to Print the Alternate Elements in an Array

C Program to Find the Odd Element given an Array with only two Different Element

C Program to Increment Every Element of the Array by One & Print Incremented Array

C Program to Find the Number of Non Repeated Elements in an Array

C Program to identify missing Numbers in a given Array

C Program to Segregate 0s on Left Side & 1s on right side of the Array

C Program to Find 2 Elements in the Array such that Difference between them is Largest

C Program to Input a String & Store their Ascii Values in an Integer Array & Print the Array

C Program to Input an Array, Store the Squares of these Elements in an Array & Print it.

Read two character array by using user input which contains name of student and their roll number. And display it.

Compulsory Homework: Make it Menu driven program

1. Display elements of M X N matrix in matrix format

2. Check if two given matrices are identical

3. To find transpose of a matrix

4. Subtraction of matrices

5. Addition of two matrices

6. Multiplication two matrices

7. Print Matrix Diagonally

8. Given Matrix is an Identity Matrix or not

9. Print upper/lower triangular elements in matrix format

10. Calculate the Sum of the Elements of each Row & Column

11. Find the Frequency of Odd & Even Numbers in the given Matrix

12. Print only border element of a matrix in matrix format rest value must be replaced with space.

Compute Following expressions on matrix, where all the operands are matrix of valid order.

1. $A*B-C$
2. $A*B-C*D$
3. $A-C*D+B$
4. A^3
5. $A-B*A^3$

Finding address of an element with given base address

addr(a[i]) = BA+ i*SIZE

add(a[i][j]) = BA + (i*n + j) * SIZE

Que – 1. Predict output of following program

```
int main()
{
    int i;
    int arr[5] = {1};
    for (i = 0; i < 5; i++)
        printf("%d ", arr[i]);
    return 0;
}
```

(A) 1 followed by four garbage values:
(B) 1 0 0 0 0
(C) 1 1 1 1 1
(D) 0 0 0 0 0

Que – 2. Predict output of following program

```
int main()
{

    int a[][] = {{1,2},{3,4}};

    int i, j;

    for (i = 0; i < 2; i++)

        for (j = 0; j < 2; j++)

            printf("%d ", a[i][j]);

    return 0;

}
```

(A) 1 2 3 4
(B) Compiler Error in line " int a[][] = {{1,2},{3,4}};"
(C) 4 garbage values
(D) 4 3 2 1

Que3-What will be the output of the program if the array begins 1200 in memory?

```c
#include<stdio.h>
int main()
{
    int arr[]={2, 3, 4, 1, 6};
    printf("%u, %u, %un", arr, &arr[0], &arr);
    return 0;
}
```

A. 1300,1200,1500

B. 1200,1200,1200

C. 1300,1400,1500

D. 1200,1200,1300

Que 4- What will be output when you will execute following c code?

```c
int main()
{
    char a[2][3][3] =
{'g','e','e','k','s','q','u','i','z'};
    printf("%s ", **a);
    return 0;
}
```

(A) Compiler Error

(B) geeksquiz followed by garbage characters

(C) geeksquiz

(D) Runtime Error

Que 5- What will be the output of the program ?

```
#include<stdio.h>

int main() {

    int a[5] = {5, 1, 15, 20, 25};

    int i, j, m;

    i = ++a[1];

    j = a[1]++;

    m = a[i++];

    printf("%d, %d, %d", i, j, m);

    return 0;
}
```

A.   2, 1, 15

B.   1, 2, 5

C.   3, 2, 15

D.   2, 3, 20

Queries and Feedback