

# 17MAY2Doubt

```
#include<stdio.h>
```

```
int main()
{
    int arri[] = { 1, 2, 3 };
    int* ptri = arri;

    char arrc[] = { 1, 2, 3 };
    char* ptrc = arrc;

    printf("sizeof arri[] = %d ", sizeof(arri));
    printf("sizeof ptri = %d ", sizeof(ptri));

    printf("sizeof arrc[] = %d ", sizeof(arrc));
    printf("sizeof ptrc = %d ", sizeof(ptrc));

    return 0;
}
a) sizeof arri[] = 3 sizeof ptri = 4 sizeof arrc[] = 3 sizeof ptrc = 4
b) sizeof arri[] = 12 sizeof ptri = 4 sizeof arrc[] = 3 sizeof ptrc = 1
c) sizeof arri[] = 3 sizeof ptri = 4 sizeof arrc[] = 3 sizeof ptrc = 1
d) sizeof arri[] = 12 sizeof ptri = 4 sizeof arrc[] = 3 sizeof ptrc = 4
```

**Answer:** d

Explanation:

Each compiler has a different memory space for pointers.

In some compilers, 8 bytes are stored whereas in some 4 bytes are stored for pointers.

And for the size of the array;

3 elements of int data type  $\rightarrow 3 \times 4 = 12$  bytes

3 elements of char data type  $\rightarrow 3 \times 1 = 3$  bytes