

Fill an array with powers of 2

2,4,8,16,32,...

$$\text{arr}[i] = f(i)$$

in this row any number is previous number * 2

```
void fillPowers(int arr[], int length) {  
    for (int i = 0; i < length; i++) {  
        arr[i] = pow(2, i + 1);    //power function  
    }  
}
```



```
void fillPowers(int arr[], int length) {  
    int b = 2; //previous number  
    for (int i = 0; i < length; i++) {  
        arr[i] = b;  
        b = b * 2;  
    }  
}
```

```
void fillPowers(int arr[], int length) {  
    arr[0]=2;  
    for (int i = 1; i < length; i++) {  
        arr[i] = arr[i-1] * 2;  
    }  
}
```