An analogy to understand encapsulation and data hiding

Let say I am making a Stack class and internally it is implemented using the array. Now I should be able to modify that array using some functions / methods like push ( ), pop( ) , peek ( )

But the user should not be able to directly access that array. That array should be private, this is known as data hiding

But that array can be modified as per our need using various methods, generally are setters( ) and getters( ), this is encapsulation. Here we wrap up all the getters, setters, that array inside a something known as Stack class. This is encapsulation

Here that array is made private inside the class. So we see data hiding is achieved via encapsulation