**General Tensor Questions**

1. **How many dimensions does each of the following have?**
   * Scalar
   * Vector
   * Matrix
   * Tensor
2. **What is the difference between torch.zeros(5,5) and torch.tensor(5,5)?** (try it)
3. **When splitting your data into features and targets, why is it commonly written as uppercase X for features and lowercase y for targets**
4. **How do you create a tensor with 3 rows 2 columns and 2 channels filled with ones in PyTorch?** (try it)
5. **Which of the following is true about PyTorch Tensors?**
   * Learning PyTorch involves complex mathematical concepts that are difficult to understand.
   * Tensors are not used in PyTorch; instead, it relies on traditional data structures like lists and arrays.
   * All PyTorch tensors are created using the same class, torch.tensor().
   * PyTorch uses different classes for scalars, vectors, matrices, and tensors, making it easy to distinguish them.
6. **What happens when you run B\_tensor = A\_tensor + 1?**
   * Adds 1 only to the first element of A\_tensor.
   * Adds 1 only to the last element of A\_tensor.
   * Increments each element in A\_tensor by 1, and updates A\_tensor by itself.
   * Increments each element in A\_tensor by 1, without modifying A\_tensor.
7. **What does tensor.shape return?** (try it…)
8. **How do you perform element-wise multiplication between two tensors in PyTorch?** (try it)
9. **What is the difference between torch.matmul(A, B) and torch.matmul(B,A)?** (try it)