Solution no 3. Theory part

1.THE DIFFERENCE IN **NP.ARRAY**, NP.ASARRAY AND **NP.ASANYARRAY**.

np.array	np.asarray	np.asanyarray
Creates a new NumPy array.	Converts input to a NumPy array if needed.	Converts input to a NumPy array, preserving subclasses.
Always creates a new array.	Avoids copying if the input is already an array.	Avoids copying if the input is already an 'ndarray', preserving subclass types.
Always creates a new array, even if input is already a NumPy array.	Uses the existing array if input is already a NumPy array.	Uses the existing array and preserves subclass types.
Can convert the data type.	Converts 'dtype' if specified; otherwise, no change.	Converts 'dtype' if specified; preserves subclass types.
When a new array is needed, possibly with 'dtype' conversion.	When a new array is needed, possibly with dtype conversion.	When you want to ensure input is a NumPy array but retain subclass types.

2. DIFFERENCE BETWEEN **DEEP SHALLOW** AND **SHALLOW COPY** --

DEEP SHALLOW	SAHLLOW COPY
Deep copy stores copies of the object's value.	Shallow Copy stores the references of objects to the original memory address.
Deep copy doesn't reflect changes made to the new/copied object in the original object.	Shallow Copy reflects changes made to the new/copied object in the original object.
Deep copy stores the copy of the original object and recursively copies the objects as well.	Shallow Copy stores the copy of the original object and points the references to the objects.
Deep copy is comparatively slower.	A shallow copy is faster.

NOTE – PLEASE CHECK PYTHON SHEET TO SEE THEIR EXAMPLES