

$y = \text{torch.take}(x_1, x_2)$

Require:  $|x_1| = (d_1, d_2, \dots, d_i)$   
 $|x_2| = (d'_1, d'_2, \dots, d'_j)$

Guarantee:  $|y| = (d'_1, d'_2, \dots, d'_j)$

$$\sigma \vdash E_1 \Rightarrow e_1, C_1$$

$$\sigma \vdash E_2 \Rightarrow e_2, C_2$$

$$k_1 = \text{rank}(e_1)$$

$$k_2 = \text{rank}(e_2)$$

$$C = \{ (k_1 \geq 0) \wedge (k_2 \geq 0) \}$$

$$\sigma \vdash \text{take}(E_1, E_2) \Rightarrow e', C' \cup C_1 \cup C_2$$

Description: Returns a new tensor composed of elements located at given input indices.