## Assignment4

## 22D10126 Yuya Okada

 $\spadesuit$ Q22 (1) When the input state to the quantum circuit represented by (110) is  $|11\rangle$ , the results for a step-by-step calculation are as follows.

$$|\Psi_{\rm in}\rangle = |11\rangle$$
  
 $|\Psi_{\rm mid}\rangle = \left(\hat{H}|1\rangle\right)$ 

- $\triangle Q23$
- **♠**Q24