Contest

Tradingene

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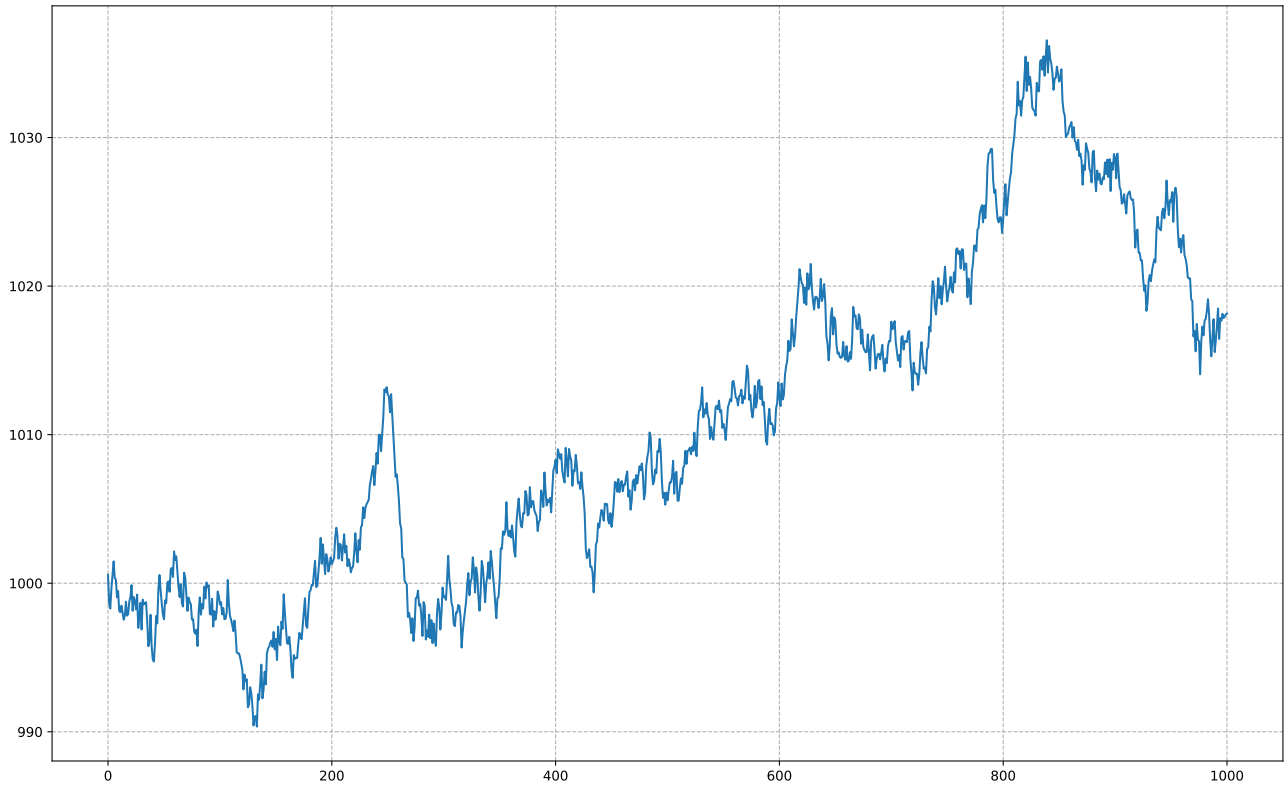Bunny has monitored the price of an asset for the last 1000 time moments and obtained the following graph:

Figure 1: Price graph of an asset

He instructs you to open a position at $t = 1000$ at price $P_{1000} = 1018.14$. You must maximize the return $r = \texttt{side} * (P_t - P_{1000})$ by closing the position at price $P_t, t > 1000$, where

$$\texttt{side} = \begin{cases} 1, & \text{if position was long,} \\ -1, & \text{if position was short} \end{cases}.$$

If at $t = 1100$ the position is still open, Bunny will demand you close it despite the return.

Estimate the return Bunny can obtain under these conditions.