

解 设  $\pi$  为着色函数, 色集  $C = \{1, 2, \cdots, 5\}$ , 着色过程如下:

$$(1) \pi(v_1) = 1, C(v_2) = \{1\}, C \setminus C(v_2) = \{2, \cdots, 5\};$$

$$(2) \pi(v_2) = 2, C(v_3) = \{1, 2\}, C \setminus C(v_3) = \{3, \cdots, 5\};$$

$$(3) \pi(v_3) = 3, C(v_4) = \{3\}, C \setminus C(v_4) = \{1, 2, 4, 5\};$$

$$(4) \pi(v_4) = 1, C(v_5) = \{1\}, C \setminus C(v_5) = \{2, \cdots, 5\};$$

$$(5) \pi(v_5) = 2, C(v_6) = \{1, 2, 3\}, C \setminus C(v_6) = \{4, 5\};$$

$$(6) \pi(v_6) = 4.$$