Epreuve 9: Acide Florhydrique

Gandoulf the magician has a plant that has just one flower. He needs at least 100 flowers to make his magic potion. On Monday morning he cuts the flower and puts it in his cauldron. During the night 2 new flowers grow on the plant to replace the one he cut.

On Tuesday morning he cuts the two flowers and adds them to the cauldron. During the night two new flowers grow to replace each flower that was cut.

It continues like that - each morning he cuts all the flowers from the plant and each night two new flowers grow to replace each one that was cut.

On which day will Gandoulf have the 100 flowers needed for his potion? Justify your answer.