

7.01

## **Set A (1:00PM to 2:00PM)**

Q.1. Write a C program to convert the provided number in minutes into days, hours and minutes. [30 Marks]

Input: Enter the number of minutes: 6768686

Output: 6768686 minutes is equivalent to 4700 days, 11 hours, and 26 minutes.

Q.2. Write a C program to count a certain breed of bacteria was found to increase at the rate of 2% per hour. Find the bacteria at the end of 2 hours if the count was initially 600000. [40 Marks]

**Hint:** Since the population of bacteria increases at the rate of 2% per hour, we use the formula  $A = P(1 + R/100)^n$ 

Output: The bacteria count after 2 hours is: 624240