

STA Online Computer Programming Contest (DWITE)
January 2003

Problem 1

Prime Numbers

A natural number, P, greater than one, is a prime number if it has no natural divisors other than 1 and P. The first seven prime numbers are 2, 3, 5, 7, 11, 13 and 17.

The input file (DATA1) will contain five lines of data. Each line will contain an integer value N, $1 \leq N \leq 32767$.

The output file (OUT1) will contain five lines of data, corresponding to the input file. Each line will contain the Nth prime number.

Hint: Efficient code will be required.

Sample Input (Only three lines given)

2
5
100

Sample Output

3
11
541