**PRATEEK LOVES CANDY**

Prateek recently graduated from college. To celebrate, he went to a candy shop and bought all the candies. The total cost was a number upto which there are n prime numbers (starting from 2). Since Prateek wants to minimize his cost, he calls you to help him find the minimum amount that needs to be paid. Being a student of Prateek bhaiya it is now your job to help him out :)

**Input Format:**

First line contains a single integer denoting the number of test cases T. Next T lines contains a single integer N, denoting the number of primes required.

**Constraints:**

T <= 10000

It is guaranteed that the answer does not exceed 10^6.

**Output Format**

Print the minimum cost that needs to be paid.

**Sample Input**

2

5

1

**Sample Output**

11

2

Program--

#include<iostream>

#include<vector>

#include<cstring>

#define MAX\_SIZE 1000005

using namespace std;

void SieveOfEratosthenes(vector<int>&primes)

{

bool prime[MAX\_SIZE];

memset(prime, true, sizeof(prime));

for (int p=2; p\*p<=MAX\_SIZE; p++)

{

if (prime[p] == true)

{

for (int i=p\*p; i<=MAX\_SIZE; i += p)

prime[i] = false;

}

}

for(int i=2;i<MAX\_SIZE;i++){

if(prime[i])

{

primes.push\_back(i);

}

}

}

int main()

{

int t;

cin>>t;

vector <int> primes;

SieveOfEratosthenes(primes);

while(t--)

{

int n;

cin>>n;

cout<<primes[n-1]<<endl;

}

}