

Program Name- Almost Prime Numbers

Project Category- Mathematical

Programming Paradigm Used- Prime Numbers

Explanation-

A **k-Almost Prime Number** is a number having exactly **k** prime factors (*not necessary distinct*).

For example,

2, 3, 5, 7, 11(in fact all prime numbers) are **1-Almost** Prime Numbers as they have only 1 prime factors (which is themselves).

4, 6, 9.... are **2-Almost** Prime Numbers as they have exactly 2 prime factors ($4 = 2*2$, $6 = 2*3$, $9 = 3*3$)

Similarly 32 is a **5-Almost** Prime Number ($32 = 2*2*2*2*2$) and so is 72 ($2*2*2*3*3$)

All the **1-Almost** Primes are called as **Prime Numbers** and all the **2-Almost** Prime are called as **semi-primes**

Purpose of the Program-

We have to print the first 10 numbers of **k-Almost** Prime Numbers (from $k=1$ to $k=5$)

References

https://en.wikipedia.org/wiki/Almost_prime