**Mansoura University**



**Faculty of Computers and Information**

**Department of Computer Science**

**Project Proposal**

# Arabic Title

أدوات عد k\_mers فعاله

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##### English Title

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Efficient k\_mers counting tools

### **Submitted by:**

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|  |  |  |
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Project Abstract:

*KMC tools is a package that allows to perform a number of operations on databases of k-mers which tends to improve overall processing time .*

Project Objectives:

*K-mer Counter is a utility designed for counting k-mers (sequences of consecutive k symbols) in a set of reads from genome sequencing projects with improve overall processing time and it can work over wide ranges of k*

Who are the project **competitive**? and how will your project be **different**?

Jellyfish is one of the competitors

KMC is much faster (even a few times for large *k*) than the existing competitors.

Tools, Hardware and Software Resources:

**Tools :- kmers counting(KMC)**

**Software:- windows or linux**

**Hardware:- PC**

SCHEDULING PHASES:

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| **From** | **To** | **Activity** |
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References:

[**BMC Bioinformatics**](https://bmcbioinformatics.biomedcentral.com/)

**OXFORD academic**