ring of Krull type is expressible as the product of a finite number of mutually co-prime packets.

In section 3, we show with the help of a counter example that an HCF domain in which every non zero non unit can be expressed as the product of a finite number of mutually co-prime packets may not be a ring of Krull type. We shall call the above mentioned integral domains, Unique Representation Domains (URD's). After the counter example we proceed to investigate the conditions under which an HCF domain should become a URD. This gives rise to the concept of *-essential domains which can be explained as follows.

Let R be an essential domain and let $\{ P_\alpha \}_{\alpha \in I}$ be the family of valued primes of R such that $R = \bigcap R_{P_\alpha}$; $\alpha \in I$, and that no two members of $\{ P_\alpha \}_{\alpha \in I}$ are comparable w.r.t. inclusion, then R is a *-essential domain if every non zero non unit of R has a finite number of minimal subvalued primes which are contained in the members of $\{ P_\alpha \}$. Finally we shall prove that a * -essential domain is a URD iff it is an HCF domain.

In section 4, we consider the stability properties of URD's under the operations of adjoining indeterminates and localization. We shall also prove that an integral domain R is a URD iff $R + xK[x]$ is a URD, where K is the field of fractions of R and x is an indeterminate over R. At the end of section 4, we establish that the concepts of GUFD, Semi-rigid Domain , HCF ring of Krull type and URD signify distinct classes of integral domains, out of a pair of which, one generalizes the other.

Our procedure of going from one generalization to a further generalization may look repetitive especially the