As the dataset have no null values and all the values Is in numerical , the only problems is dataset is widely imbalance and we have to scale the dataset.

We have face the challengs when we are selecting the best model for dataset because the dataset fall in regression and for that get a good accuracy score is difficult.

We have make all the applicable model which is applicable to the business case ,after hyperparameter turning we select the xtreme gradient boosing which is quite good then all other algorithm .

**Suggestions to the Doctors to identify the skin diseases of the patient**

**Scaling:** Highly indicative of psoriasis and seborrheic dermatitis.

**Definite Borders:** Helps distinguish psoriasis (clear borders) from eczema (diffuse borders).

**Parakeratosis:** A hallmark of psoriasis, differentiating it from other inflammatory conditions.

**Munro Microabscesses:** Specific to psoriasis, making it a critical diagnostic feature.

**Band-like Infiltrate:** Strongly associated with lichen planus.

**Saw-Tooth Appearance of Rete Ridges:** Characteristic of lichen planus, useful for differentiation.

**Thinning of Suprapapillary Epidermis:** Specific to psoriasis, aiding in accurate classification.

**Family History:** Genetic predisposition significantly impacts the likelihood of diseases like psoriasis.

**Age:** Some skin conditions have age-specific prevalence, assisting in narrowing down diagnoses.

**Location of Lesions:** Involvement of knees, elbows, and scalp is typical for psoriasis.