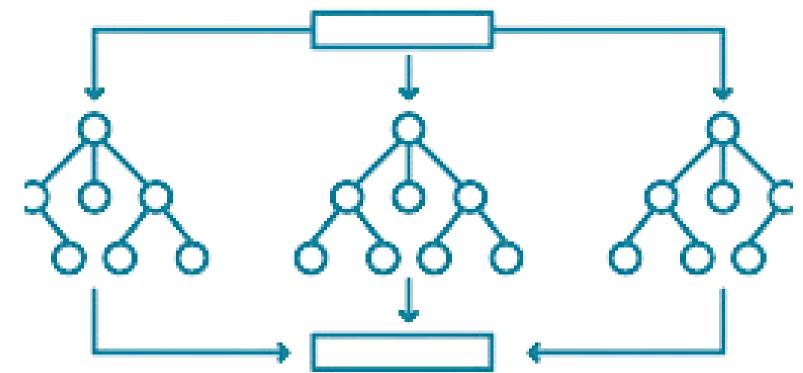
Random Forest Algorithm BY MUHAMMAD SAOOD CHOUDHARY

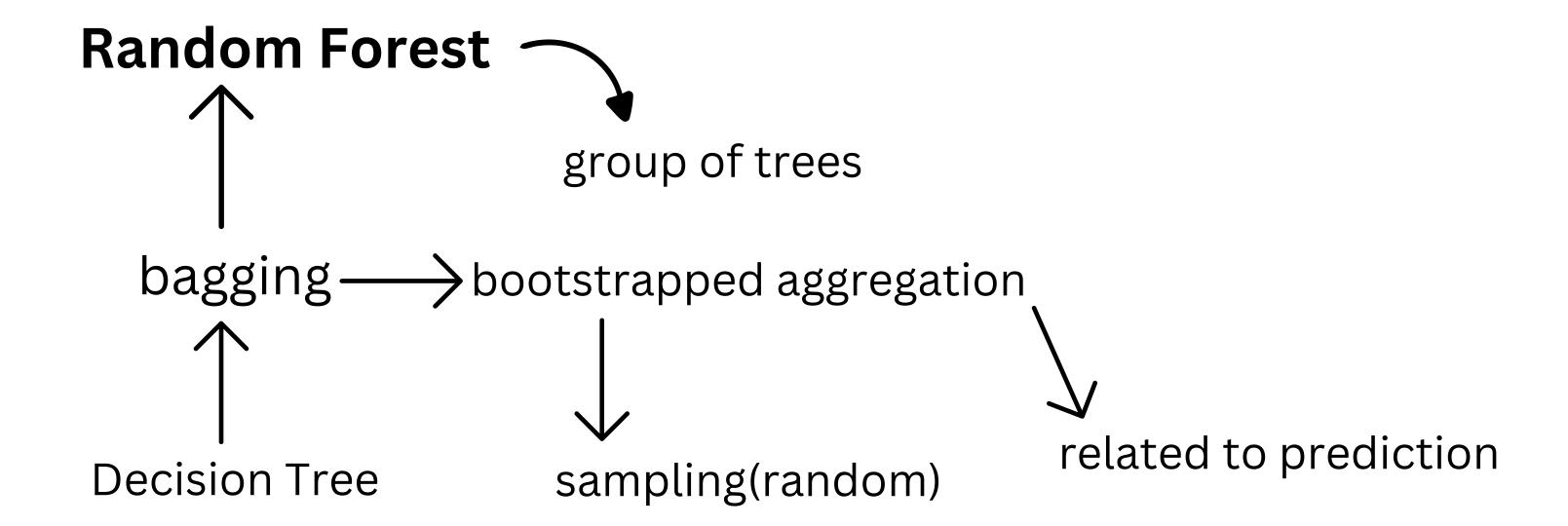
Introduction

 A combination of the output of multiple decision trees is used to reach a single result.

• It handles both classification and regression problems.

 A group learning algorithm based on bagging.





Working

 $D=1000 \text{ rows} \longrightarrow \text{Use in Samples}$



Every DT(nodes) will be different as samples are random and different

Types of Sampling

- Row Samples
- Column/Feature Samples
- Combination

How to take samples

- with replacement
- without replacement

After training we can say like we input some new values to check it's class(in classification

$$\begin{array}{c} \text{DT_1} \longrightarrow & 0 \\ \text{DT_2} \longrightarrow & 1 \\ \text{DT_3} \longrightarrow & 1 \\ \text{DT_4} \longrightarrow & 1 \end{array}$$