Analyze indexes performance

Query: select \* from students where name = 'Tamas';

Hash:

Timeline

Description automatically generated with medium confidenceB-Tree:

Graphical user interface, text, application, email

Description automatically generatedGIN:

Graphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGIST:

Query: select \* from students where surname like 'Sow%';

GIN:

Graphical user interface, text, application, email

Description automatically generatedB-Tree:

Table

Description automatically generated with medium confidenceUsing Seq Scan due to partial match

Graphical user interface, text, application, email

Description automatically generated with medium confidenceHash:

Using Seq Scan due to partial match

GIST:

Graphical user interface, text, application

Description automatically generated with medium confidence

Query: select \* from students where phone\_number like '%123%';

B-Tree:

Graphical user interface, text, application, email

Description automatically generatedHash:

Graphical user interface, text, application

Description automatically generatedGIN:

Graphical user interface, text, application, email

Description automatically generatedGIST:

Graphical user interface, text, application

Description automatically generated

Query: select s.id, s.name, s.surname, sb.subject\_name, r.mark from students s join exam\_results r on s.id = r.student\_id join subjects sb on sb.id = r.subject\_id where s.surname like '%son%';

B-Tree (surname):

Nest loop

Graphical user interface, text, application, email

Description automatically generatedWithout b-tree indexes in ids

Text, application

Description automatically generatedWith b-tree indexes in ids

Graphical user interface, text, application, email

Description automatically generatedHash join:

Merge join:

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generatedHash:

GIN:

Text, application, email

Description automatically generated

GIST:

Graphical user interface, text, application, email

Description automatically generated