



INTEGRACIJA DATAMINING-A I ETL-A UNUTAR ORACLE WAREHOUSE BUILDER-A

oo

ZVONIMIR HRKAĆ



SADRŽAJ



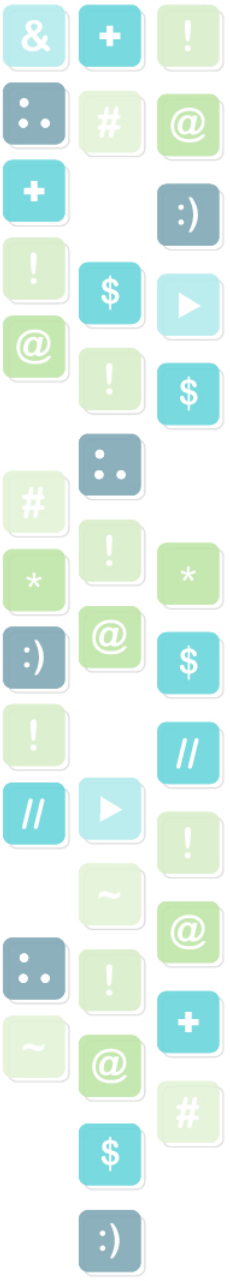
1. UVOD

2. PAKET DBMS_PREDICTIVE_ANALYTICS

3. INTEGRACIJA U ORACLE WAREHOUSE BUILDER

4. PERFORMANSE

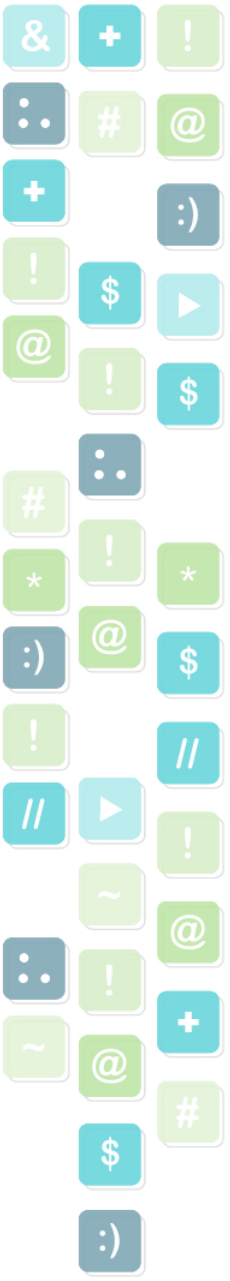
5. ZAKLJUČAK





> ETL

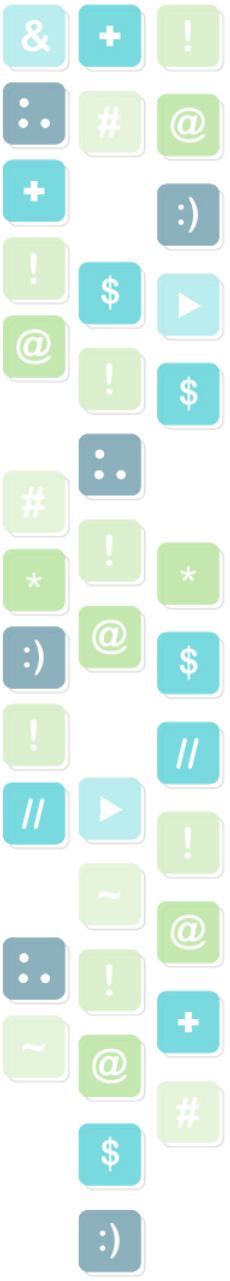
- EKSTRAKCIJA PODATAKA
- TRANSFORMACIJA PODATAKA
- UČITAVANJE PODATAKA



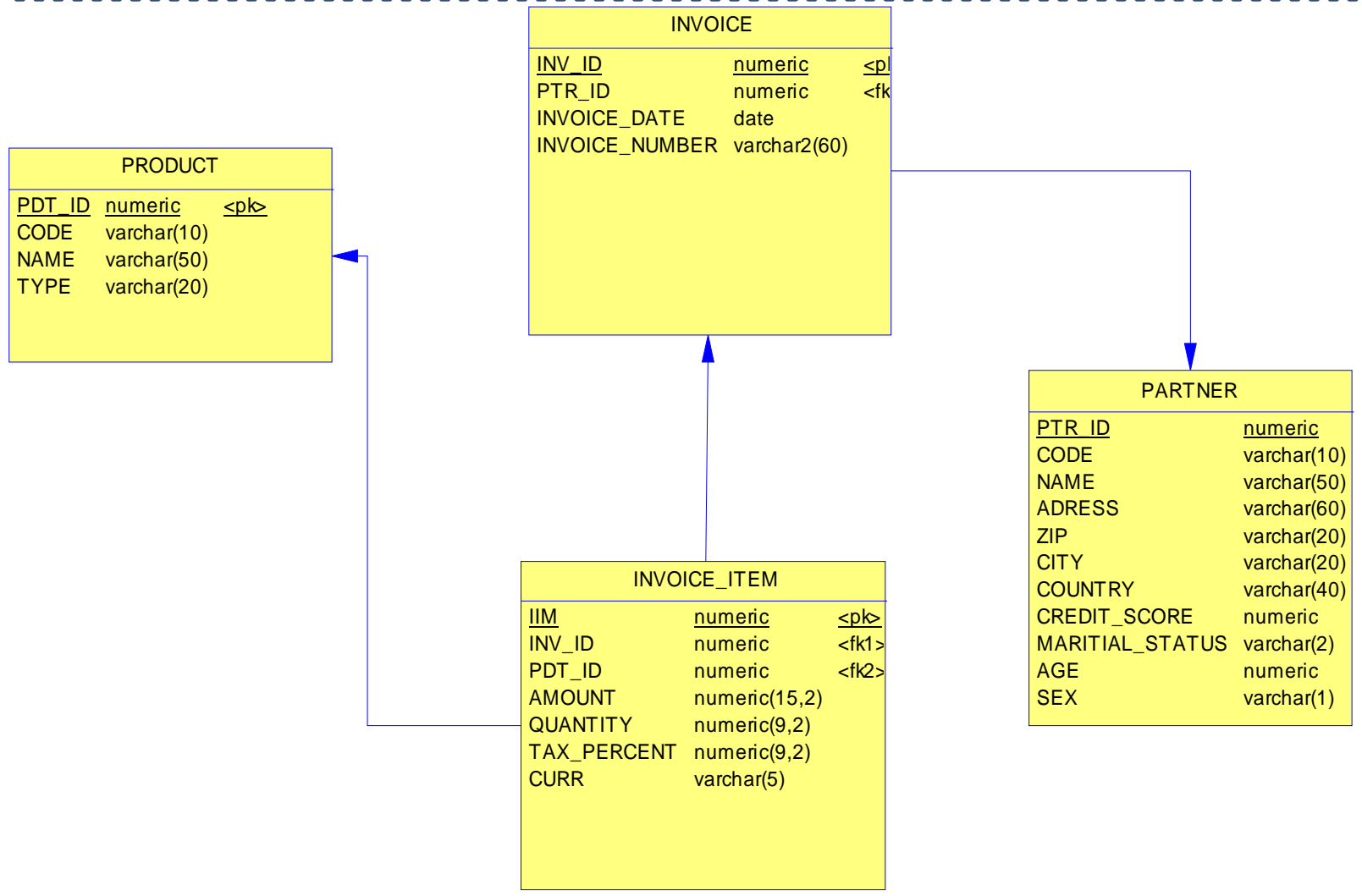


> DATAMINING

- EKSTRAKCIJA PODATAKA
- ANALIZA PODATAKA
- DAVANJE DODATNE INFORMACIJE PODACIMA

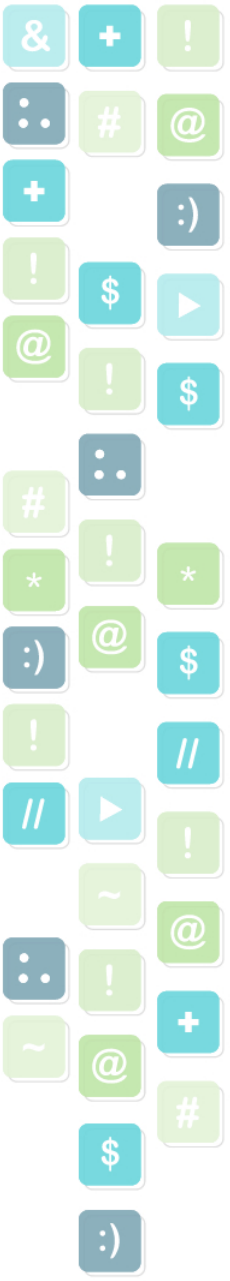


UVOD – OPIS PROBLEMA





› KVALITETA PODATAKA





SADRŽAJ



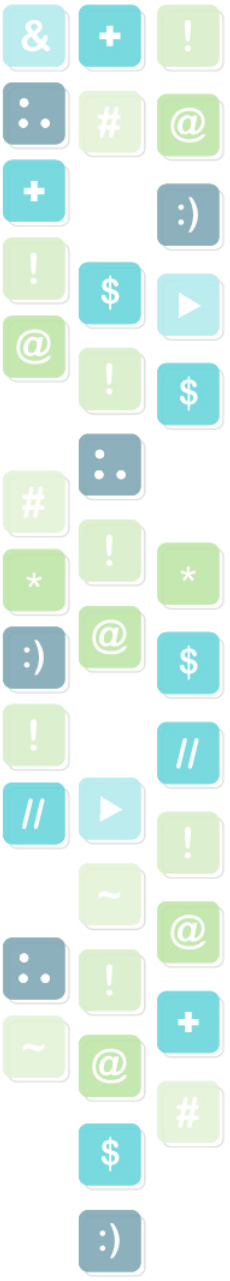
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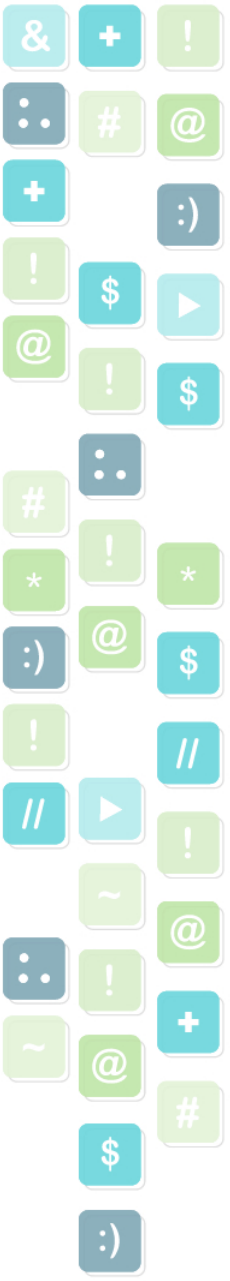


DBMS_PREDICTIVE_ANALYTICS



> AUTOMATIZACIJA PROCESA DATA MININGA

- DATA PREPROCESING
- MODEL BUILDING
- DATA SCORING



DBMS_PREDICTIVE_ANALYTICS- PREDNOSTI I NEDOSTACI

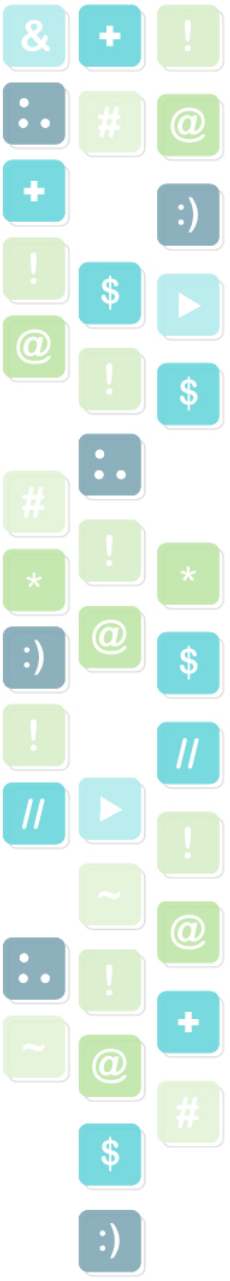


> PREDNOSTI

- JEDNOSTAVNOST, INTUITIVNOST
- NE ZAHTIJEVA PREDZNAJE

> NEDOSTATCI

- MALE MOGUĆNOSTI PARAMETRIZACIJE
- NE POSTOJI MOGUĆNOST OPTIMIZACIJE



DBMS_PREDICTIVE_ANALYTICS- PRIPREMA ZA RAD

```

CREATE OR REPLACE VIEW V_PARTNER
(PTR_ID, ZIP, CITY, COUNTRY, CREDIT_SCORE,
MARITAL_STATUS, AGE, SEX)
AS
SELECT P.PTR_ID,
       P.ZIP,
       P.CITY,
       P.COUNTRY,
       P.CREDIT_SCORE,
       P.MARITAL_STATUS,
       P.AGE,
       P.SEX
FROM   PARTNER P

```

DBMS_PREDICTIVE_ANALYTICS - EXPLAIN

BEGIN

```
DBMS_PREDICTIVE_ANALYTICS.EXPLAIN('V_PARTNER',
                                     'CREDIT_SCORE',
                                     'PARNTER_FULL_ANALITICS');
```

END;

ATTRIBUTE_NAME	EXPLANATORY_VALUE	RANK
AGE	0,7166560765	1
SEX	0,679097872	2
MARITIAL_STATUS	0,679097872	2
CITY	0,597770288	3
ZIP	0,587770288	3
COUNTRY	0	4
PTR_ID	0	4

DBMS_PREDICTIVE_ANALYTICS- PRIPREMA ZA RAD

```

CREATE OR REPLACE VIEW V_PARTNER
(PTR_ID, ZIP, CITY, CREDIT_SCORE,
 MARITAL_STATUS, AGE, SEX)
AS
SELECT P.PTR_ID,
       P.ZIP,
       P.CITY,
       P.CREDIT_SCORE,
       P.MARITAL_STATUS,
       P.AGE,
       P.SEX
FROM   PARTNER P

```

DBMS_PREDICTIVE_ANALYTICS - PREDICT

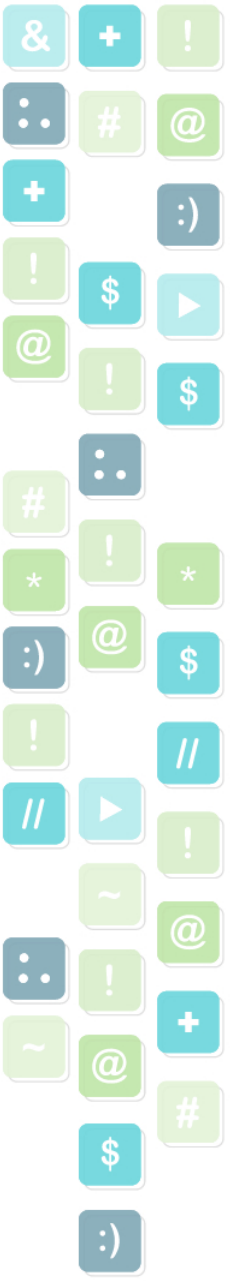
```

DECLARE
  L_ACCURACY NUMBER;
BEGIN
  DBMS_PREDICTIVE_ANALYTICS.PREDICT(L_ACCURACY,
                                     'V_PARTNER',
                                     'PTR_ID',
                                     'CREDIT_SCORE',
                                     'PARTNER_CREDIT_SCORE_ASS');
END;
```



DBMS_PREDICTIVE_ANALYTICS – REZULTAT IZVRŠAVANJA

PTR_ID	PREDICTION	PROBABILITY
1	200	1
2	50	0,999998986721039
3	300	1
...
...





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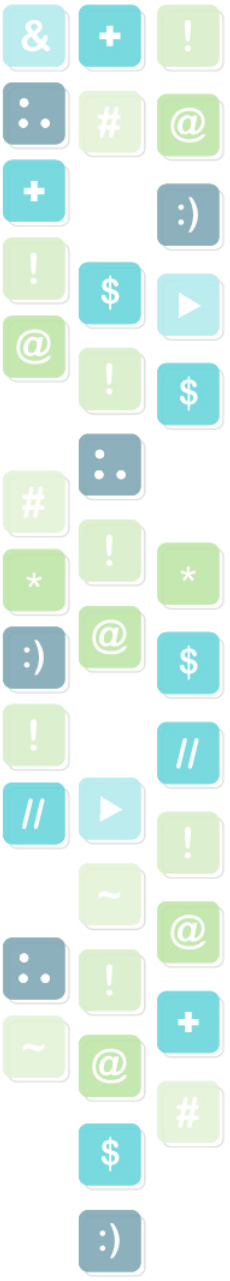
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INTEGRACIJA U ORACLE WAREHOUSE BUILDER -

KORACI

1. PRIVREMENA TABLICA ZA KORIŠTENJE UNUTAR MAPIRANJA
2. PROCEDURA KOJA RADI DROP REČENE TABLICE I POZIVA PREDICT PROCEDURU

DBMS_PREDICTIVE_ANALYTICS.PREDICT PROCEDURU

DECLARE

L_ACCURACY NUMBER;

BEGIN

EXECUTE IMMEDIATE('DROP TABLE
PARTNER_CREDIT_SCORE_ASS');

DBMS_PREDICTIVE_ANALYTICS.PREDICT(L_ACCURACY,

'V_PARTNER',

'PTR_ID',

'CREDIT_SCORE',

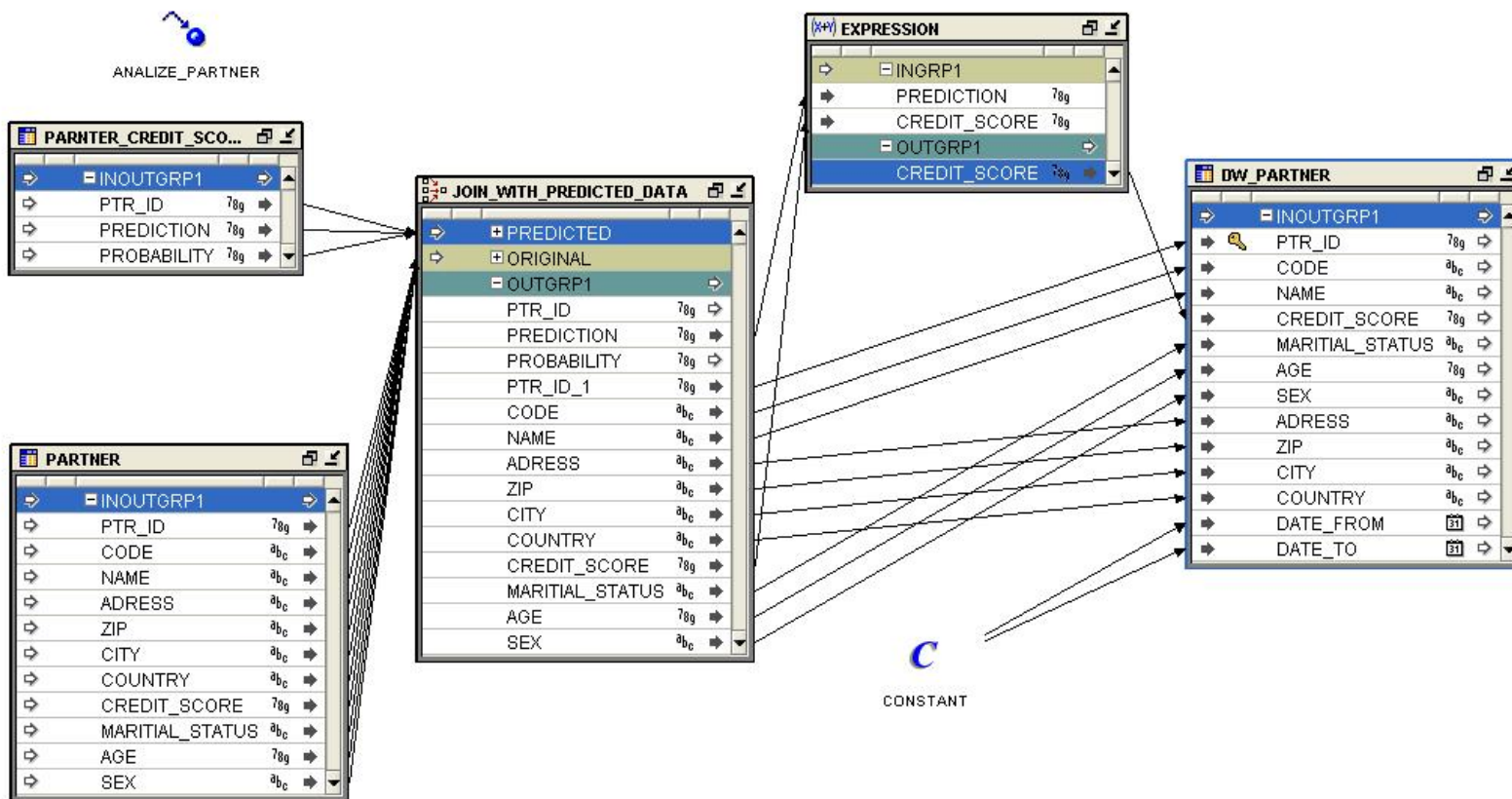
'PARTNER_CREDIT_SCORE_ASS');

END;

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KORACI

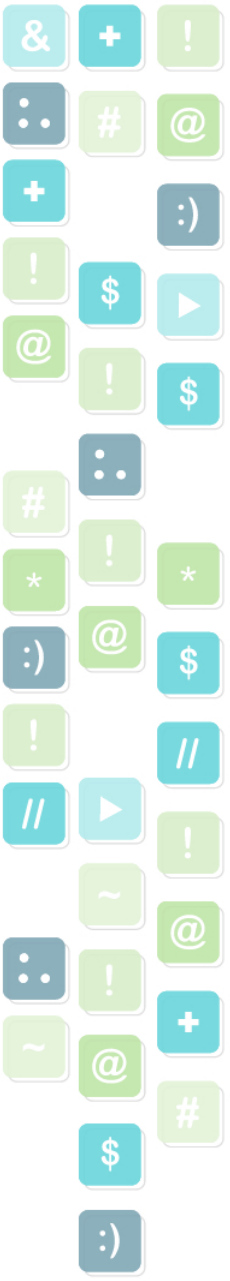
3. MAPIRANJE U ORACLE WAREHOUSE BUILDER-U



SADRŽAJ



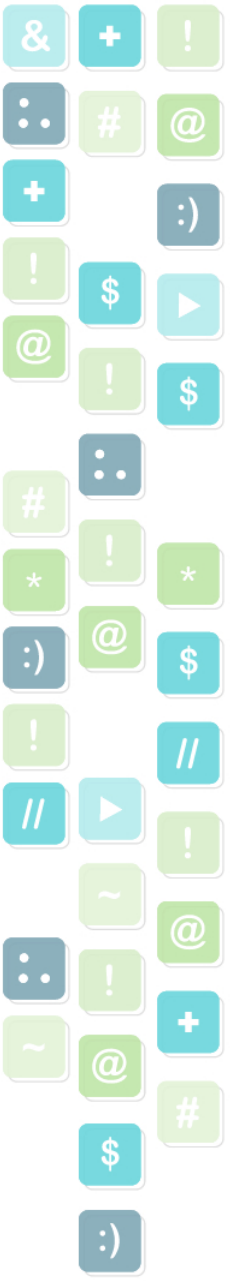
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PERFORMANCE



Broj redaka	Vrijeme izvršavanja	Udio null vrijednosti(%)
10000	14	10%
10000	14	20%
100000	166	10%
100000	149	20%
1000000	1727	10%
1000000	1665	20%

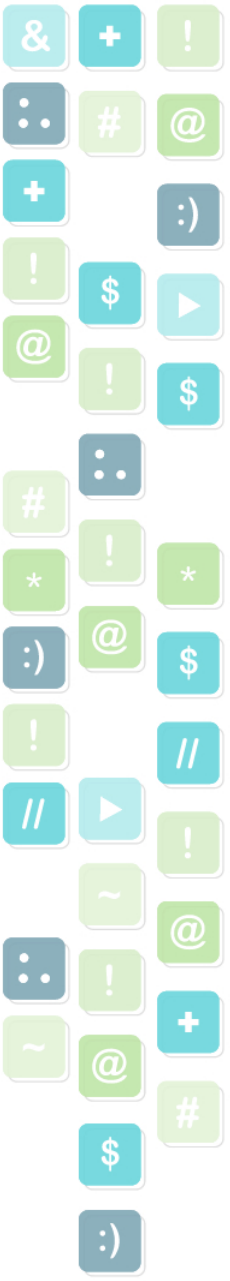




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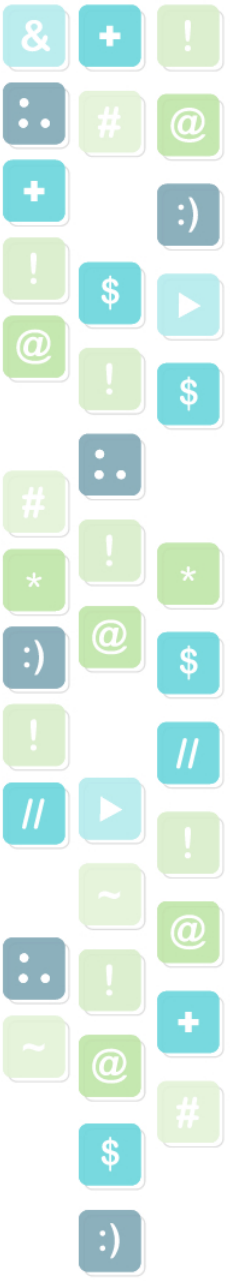
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ZAKLJUČAK



- > DATA MINING ZA NEZNALICE
- > IZRAZITA JEDNOSTAVNOST
- > BRZA PRIMJENJIVOST
- > PROBLEMATIČNE PERFORMANSE KOD VELIKOG BROJA REDAKA ZA ANALIZU
- > PRIMJENIVO U SPECIFIČNIM SLUČAJEVIMA



PITANJA I ODGOVORI

