

Федеральное государственное бюджетное образовательное учреждение высшего образования «Новосибирский государственный технический университет»



Кафедра прикладной математики

Лабораторная работа № 6

по дисциплине «Введение в ИИ и логическое программирование»

Внелогические предикаты Пролога

Бригада 10 ЗАЛЕВСКИЙ ВЛАДИСЛАВ

ЗАТОЛОЦКАЯ ЮЛИЯ

Группа ПМ-91 ЛЕБЕДЕВ НИКИТА

Преподаватель АВДЕЕНКО ТАТЬЯНА ВАДМЛИРИОВНА

1. Текст индивидуального задания

Даны текстовый файл F и строка S. Получить все строки файла F, содержащие в качестве фрагмента строку S.

Содержимое текстового файла:

I wasn't born a freak

I was born who I am

The circus came later

When they couldn't understand

To be born under punchlines

When all I want is to breathe

Turned out not quite what they wanted

Sold off at thirteen

And what a fucking relief

I keep my anger in notebooks

And my passion on the stage

I sell out night after night after night

And every Sunday a parade

Come see me in the parade

Every Sunday a parade

Wish I could grab 'em all and say

That now that I'm who I want,

All anybody seems to want is to stare

The only monsters in the freak show

Have paid to get their ass to those chairs

I'm not a Sunday school lesson,

Just decided not to live my life scared

The only monsters in the freak show

Lurk in the closet under the stairs

I found some love for the first time

She's as removed as myself,

Paired up we swim against the current

Like a couple of mermaids from hell

I hear you call me Rob as in Robert,

That's a mistake no that's not who I am

The bearded lady's what the barker calls me

But to you it's YES MA'AM

YES MA'AM

```
YES MA'AM
   I wasn't born a freak
   I was born who I am
   The circus came later
   When they couldn't understand
   Co-couldn't understand
   Co-couldn't
   That now that I'm who I want,
   All anybody seems to want is to stare
   The only monsters in the freak show
   Have paid to get their ass to those chairs
   I'm not a Sunday school lesson,
   Just decided not to live my life scared
   The only monsters in the freak show
   Lurk in the closet under the stairs
   I wasn't born a freak (I was born who I am)
   I was born who I am
   The circus came later
   When no one could understand
   No one could understand
   I wasn't born a freak
   I was born who I am
2. Текст программы
   DOMAINS
          FILE = input
   predicates
          nondeterm repfile(file)
          g(String)
          find(String,String)
          searchstr(String,String)
          CLAUSES
   repfile(_).
   repfile(F):-not(eof(F)),repfile(F).
   searchstr(X,S):-
   concat(_, X, S),!.
   searchstr(X,S):-
   concat(X, _, S),!.
   searchstr(X,S):-
   frontchar (S,C,Rest),
```

```
searchstr(X,Rest),!.

find(S,L):-searchstr(S,L),write(L),nl,!.

g(S):-openread(input,"Z:\\prolog\\input.txt"),
readdevice(input),
repfile(input),
readln(L),
find(S,L),
fail.

GOAL g("to").
```

3. Тесты программы

Ввод: **to** Вывод:

When all I want is **to** breathe
All anybody seems **to** want is to stare
Have paid **to** get their ass to those chairs
Just decided not **to** live my life scared
But **to** you it's YES MA'AM
All anybody seems **to** want is to stare
Have paid to get their ass **to** those chairs
Just decided not **to** live my life scared

Ввод: **mashina** Вывод: (пусто)