FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING

System Programming and Compiler Construction

VI Semester (Computer) Academic Year: 22-23

Code:

```
#include<stdio.h>
#include<string.h>
int i = 0;
char exp[50];
void advance(){
  i++;
}
void pE()
{
  pT();
  pEdash();
}
void pEdash()
{
  if(exp[i] =='+')
  {
    advance();
    pT();
    pEdash();
  }
}
void pT()
{
  pF();
```

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```
pTdash();
}
void pTdash()
{
  if(exp[i] == '*')
  {
    advance();
    pF();
    pTdash();
  }
}
void pF()
  if(exp[i]=="id"){
    advance();
  }
  if(exp[i]=='(')
  {
    advance();
    pE();
    if(exp[i]==')')
       advance();
    else
      er();
  }
```

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```
else if(exp[i]=='i')
 {advance();}
 else
   er();
}
void er()
{ exit(0);}
int main()
{
 printf("Enter the expression: ");
 scanf("%s",exp);
 int n = strlen(exp);
 pE(exp);
 if(i == n)
   printf("Accepted");
  else
   printf("Rejected");
}
Output:
 pracs.c.izz.s. note. include
 Enter the expression: i+id
 Rejected
 PS C:\Users\dsouza\OneDrive\Desk
  Enter the expression: i+i
  Accepted
OPS C:\Users\dsouza\OneDrive\Desktop\The
```

Conclusion: Thus we have designed a recursive descent parser is a kind of top-down parser built from a set of mutually-recursive procedures (or a non-recursive equivalent)