

WEEK-6: Construct YACC code to perform Arithmetic Operations.

Week6.l

```
%{  
  
    #include "y.tab.h"  
  
%}  
  
%%  
  
[a-zA-Z_][a-zA-Z_0-9]* return id;  
[0-9]+(\.[0-9]*)?      return num;  
[+/*]                  return op;  
.  
                        return yytext[0];  
\n                      return 0;  
  
%%  
  
int yywrap()  
{  
    return 1;  
}
```

Week6.y

```
%{  
  
    #include<stdio.h>  
  
    int valid=1;  
  
%}  
  
%token num id op  
  
%%  
  
start : id '=' s ';' ;
```

```
s : id x
```

```
| num x
```

```
| '-' num x
```

```
| '(' s ')' x
```

```
;
```

```
x : op s
```

```
| '-' s
```

```
|
```

```
;
```

```
%%
```

```
int yyerror()
```

```
{
```

```
valid=0;
```

```
printf("\nInvalid expression!\n");
```

```
return 0;
```

```
}
```

```
int main()
```

```
{
```

```
printf("\nEnter the expression:\n");
```

```
yyparse();
```

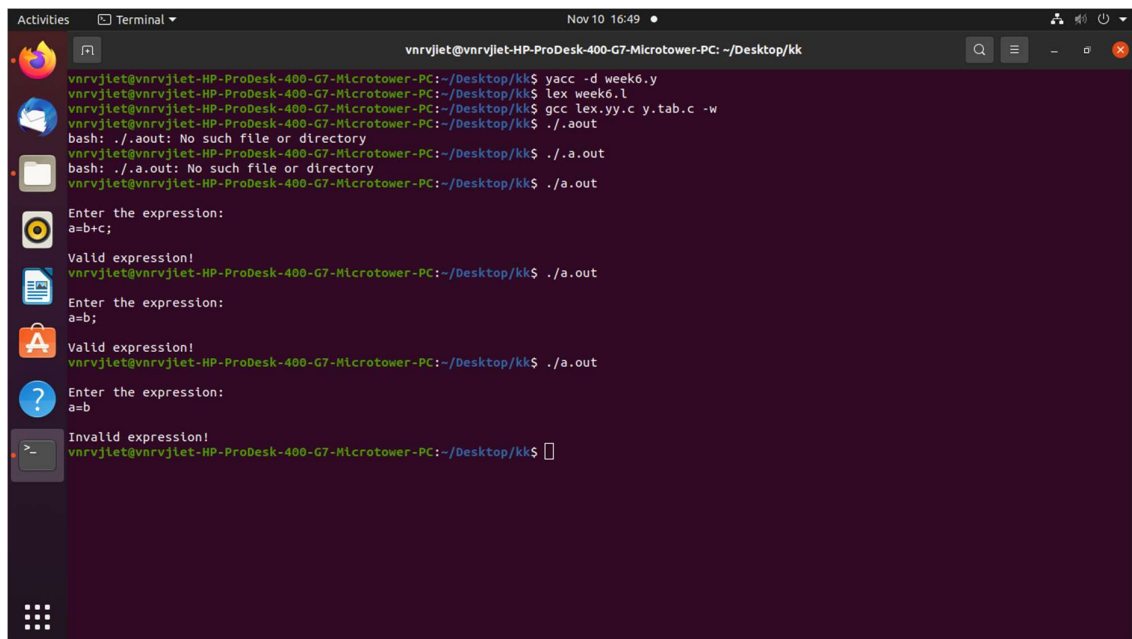
```
if(valid)
```

```
{
```

```
printf("\nValid expression!\n");
```

```
}
```

```
}
```



```
Nov 10 16:49
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC: ~/Desktop/kk
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ yacc -d week6.y
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ lex week6.l
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ gcc lex.yy.c y.tab.c -w
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ ./a.out
bash: ./a.out: No such file or directory
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ ./a.out
bash: ./a.out: No such file or directory
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ ./a.out
Enter the expression:
a=b+c;
Valid expression!
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ ./a.out
Enter the expression:
a=b;
Valid expression!
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$ ./a.out
Enter the expression:
a=b
Invalid expression!
vnrvjlet@vnrvjlet-HP-ProDesk-400-G7-Microtower-PC:~/Desktop/kk$
```