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CC LAB 05 | Decimal to Hexadecimal

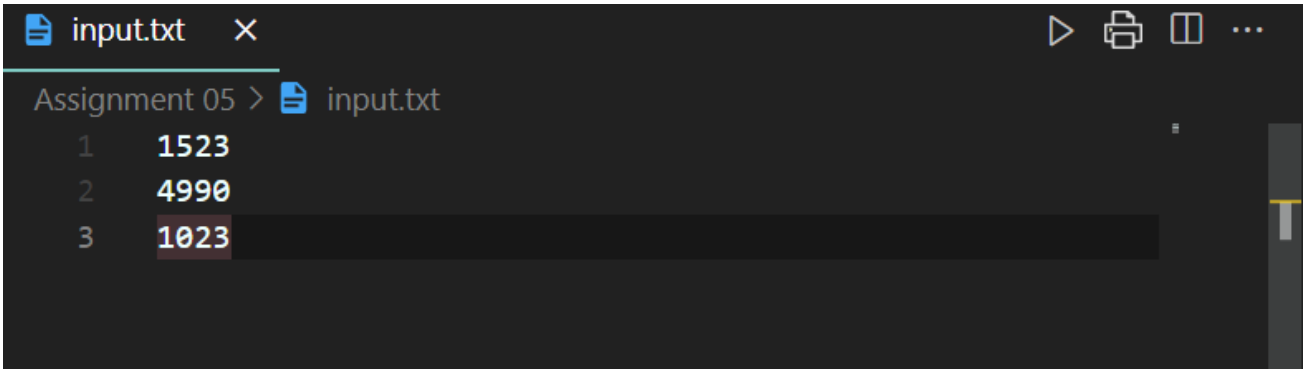
Aim: LEX program for conversion of decimal number to hexadecimal number in a file.

Implementation:

```
%option noyywrap
%{
    #include <stdio.h>
    int num =0, digit=0, count=0, pcount=0, rem, i;
    char hexAr[] = {'A', 'B', 'C', 'D', 'E', 'F'};
    char result[100];

%}

number [0-9]+

%%

{number} {

    num = atoi(yytext);
    count = 0;
    while (num > 0) {

        rem = num%16;
        if (rem>9) {
            result[count] = hexAr[rem%10];
        }
        else {
            result[count] = '0'+rem;
        }
        count += 1;
        num=num/16;

    }

    for (i=count-1; i>=0; --i) {
        printf("%c", result[i]);
    }
    printf("\n");
}
[.\n] {printf("%c", yytext[0]);}
%%
```

```c
int main(int argc, char* argv[])
{
    if (argc==2) {
        yyin=fopen(argv[1],"r");
    }
    else {
        printf("\nEnter the input:\n");
        yyin=stdin;
    }
    yylex();
    return 0;
}
```

Input File:



Output: