

`/*infix to Postfix conversion*/`

```
#include<stdio.h>
```

```
#include<ctype.h>
```

```
char stack[100];
```

```
int top = -1;
```

```
void push(char x)
```

```
{
```

```
    stack[++top] = x;
```

```
}
```

```
char pop()
```

```
{
```

```
    if(top == -1)
```

```
        return -1;
```

```
    else
```

```
        return stack[top--];
```

```
}
```

```
int priority(char x)
```

```
{
```

```
    if(x == '(')
```

```
        return 0;
```

```
    if(x == '+' || x == '-')
```

```
        return 1;
```

```
    if(x == '*' || x == '/')
```

```
        return 2;
```

```
    return 0;
```

```
}
```

```

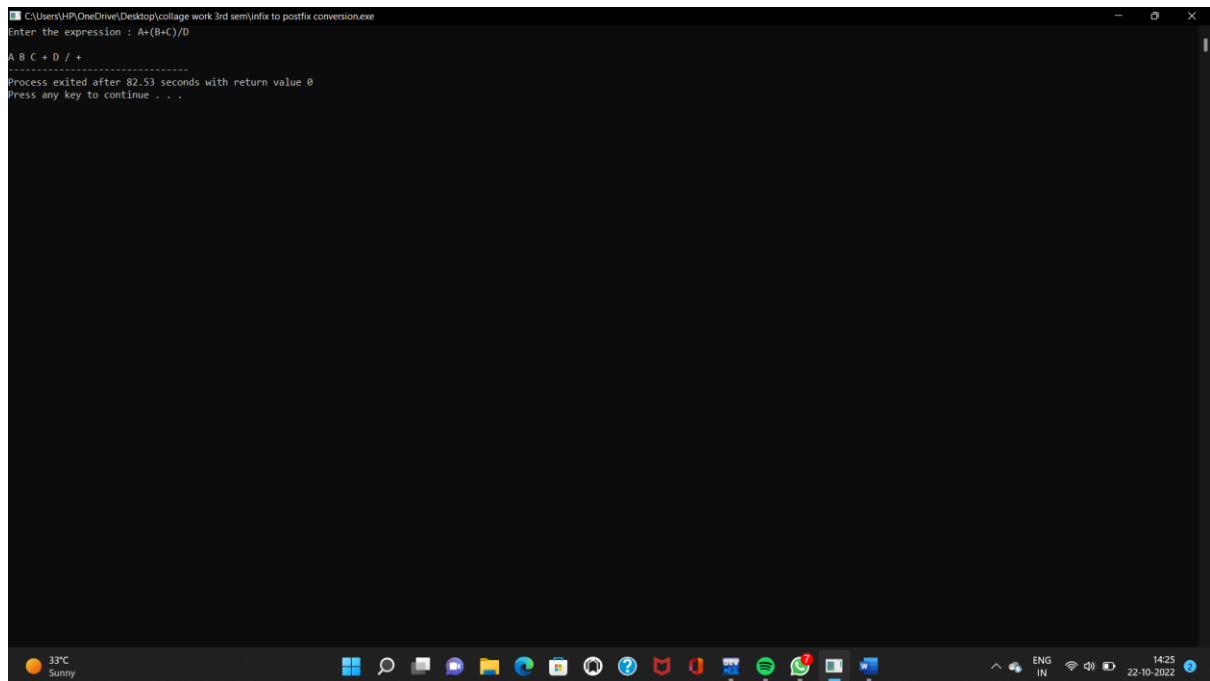
int main()
{
    char exp[100];
    char *e, x;
    printf("Enter the expression : ");
    scanf("%s",exp);
    printf("\n");
    e = exp;

    while(*e != '\0')
    {
        if(isalnum(*e))
            printf("%c ",*e);
        else if(*e == '(')
            push(*e);
        else if(*e == ')')
        {
            while((x = pop()) != '(')
                printf("%c ", x);
        }
        else
        {
            while(priority(stack[top]) >= priority(*e))
                printf("%c ",pop());
            push(*e);
        }
        e++;
    }

    while(top != -1)
    {

```

```
printf("%c ",pop());  
}return 0;  
}
```



A screenshot of a Windows command prompt window. The title bar shows the file path: C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\infix to postfix conversion.exe. The prompt displays the text "Enter the expression : A+(B+C)/D". Below this, the output shows the infix expression "A B C + D / +" and a separator line of dashes. The final output states "Process exited after 82.53 seconds with return value 0" and "Press any key to continue . . .". The Windows taskbar at the bottom shows the system tray with a temperature of 33°C, weather "Sunny", and the date "22-10-2022".

```
C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\infix to postfix conversion.exe  
Enter the expression : A+(B+C)/D  
A B C + D / +  
-----  
Process exited after 82.53 seconds with return value 0  
Press any key to continue . . .
```