

```
void main()
```

```
{
```

```
    char infix[20];
```

```
    char postfix[20];
```

```
    clrscr();
```

```
    printf("enter the valid infix expression\n");
```

```
    scanf("%s", infix);
```

```
    infix-postfix(infix, postfix);
```

```
    printf("the postfix exp is\n");
```

```
    printf(the "%s\n", postfix);
```

```
    getch();
```

```
}
```

```
default : return 7;  
}
```

Stack program

```
void infix-to-prefix(char infix[], char prefix[])  
{
```

```
    int top, i, j;
```

```
    char s[30], symbol;
```

```
    top = -1;
```

```
    s[++top] = '#';
```

```
    j = 0;
```

```
    for(i=0; i<strlen(infix); i++)
```

```
    {  
        symbol = infix[i];
```

```
        while (F(s[top] > h(symbol))
```

```
        {  
            prefix[j] = s[top--];
```

```
            j++;
```

```
        }  
        if (F(s[top]) != h(symbol))
```

```
            s[++top] = symbol;
```

```
        else
```

```
            top--;
```

```
    }
```

```
    while (s[top] != '#')
```

```
    {  
        prefix[j++] = s[top--];
```

```
    }
```

```
    prefix[j] = '\0';
```

```
}
```

```

#include <stdio.h>
#include <string.h>
#include <process.h>
#
int F(char symbol)
{
    case '+':
    case '-': return 2;
    case '*':
    case '/': return 4;
    case '^':
    case '$': return 5;
    case 'c': return 0;
    case '#': return -1;
    default: return 8;
}

```

```

int h(char symbol)
{
    switch (symbol)
    {
        case '+':
        case '-': return 1;
        case '*':
        case '/': return 3;
        case '^':
        case '$': return 6;
        case 'c': return 9;
        case '#': return 0;
    }
}

```