Name   Abdul wahab
Roll no   19484

Data stbucture and algorithem
          Assignment no 2 (Bsit-4th sem)

Qno1:- A+B*C-(D\$E*F)/G#
    (with stack)

Scan symbol	stack	PsN
A		A
+	+	A
B	+	AB
*	+*	AB
C	+*	ABC
-	-	ABC*+
(	-(	ABC*+
D	-(	ABC*+D
\$	-(\$	ABC*+D
E	-(\$	ABC*+DE
*	-(*	ABC*+DE\$
F	-(*	ABC*+DE\$F
)	-	ABC*+DE\$F*
/	-/	ABC*+DE\$F*
G	-/	ABC*+DE\$F*G
#		ABC*+DE\$F*G/-

((A * B / C) + (D - E $ F * G)) + H #

with using stack:-

Scan symbol	Stack	PSN
(	(	
(	((	
A	((	A
*	((*	A
B	((*	AB
/	((/	AB *
C	((/	AB * C
)	(	AB * C /
+	(+	A B * C /
(	(+ (	AB * C /
D	(+ (	ABx C / D
-	(+ (-	AB * C/D
E	(+ (-	AB * C/DE
$	(+ (- $	AB * C/DE
F	(+ (- $	AB * C/DEF
*	(+ (- *	AB * C/DEF $
G	(+ (- *	AB * C/DEF $ G
)	(+	AB * C/DEF $ G * -
)		AB * C/DEF $ G * - +
H	+	AB * C/DEF $ G * - + H
#		AB * C/DEF $ G * - + H +

Qno3 ((A+B)* (c-D)+E)/(F+G)# with stack

Scan Symbol	stack	PsN
(	(	
(	((	
A	((	A
+	((+	A
B	((+	AB
)	(	AB+
*	(*	A B+
(	(*(	AB+
C	(*(	AB+C
-	(*(-	AB+C
D	(*(-	AB+CD
)	(*	AB+CD-
+	(+	AB+CD-*
E	(+	AB+CD-*E
)		AB+CD-*E+
/	/	AB+CD-*E+
(	/(	AB+CD-*E+
F	/(	AB+CD-*E+F
+	/(+	AB+CD-*E+F
G	/(+	AB+CD-*E+FG
)	/	AB+CD-*E+FG+
#		AB+CD-E+FG+/