

Judge's Input Data for Problem #5

S1PS
D3P0
S2GF
02GS
02GF
03P0
S2RF
S3GS
D2GS
01GS
01GF
S2PS

02GF
01PF
D2P0
D3R0
S2P0
01GF
01GS
D2G0
S3PF
S2GF
D2GS
S1RS

D2R0
01GS
01PS
02GS
03R0
02R0
D1R0
S1PF
02GF
S2PS
01PF
S2GS

S1PS
02P0
S3R0
D3PS

S1R0
S2GS
D1PF
D1G0
03PS
S2P0
01G0
D3G0

S2G0
D2RS
D3PS
D3P0
D3G0
S1RS
S3R0
03PS
D1R0
S3RF
S3RS
S2P0