# Shoot Out Flowchart

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Purpose: Shoot off Simulation

System Libraries:
iostream
cstdlib
ctime
cmath
iomanip

User Libraries:
None

Global Constants:
MAXRAND = pow(2,31)-1

Function Prototypes:
pUnifrm();
pKill(float);

A

A

main

set random seed:
srand(static_cast<unsigned>(time(0)));

Declare Variables:
aSkill,bSkill,cSkill;
aLive,bLive,cLive;

Initialize Variables:
aSkill = 1.0f/3;
bSkill = 1.0f/2;
cSkill = 1.0f;
aLive = bLive = cLive = true

B

float pUnifrm()

rand()/MAXRAND

bool pKill(float prb)

pUnifrm()<=prb — true → true — false

B

aLive — true → cLive — true → cLive = !pKill(aSkill)

bLive — true → bLive = !pKill(aSkill)

bLive — true → cLive — true → cLive = !pKill(bSkill)

aLive — true → aLive = !pKill(bSkill)

cLive — true → bLive — true → bLive = !pKill(cSkill)

aLive — true → aLive = !pKill(cSkill)

Display who's dead and who's alive → return 0 exit main