

```
/* REXX */  
  
trace o  
  
hmscore = 0  
  
awscore = 0  
  
inning = 1  
  
cpu = "  
  
say 'Choose two teams with space in between your team names:'  
  
parse upper pull team1 team2 .  
  
say 'Do you want to face the computer? (y/n)'  
  
pull answer  
  
if answer = y then do  
  
say 'Which team do you want to be the computer?'  
  
pull answer1  
  
    if answer1 = team1 then do  
  
        cpu = team1  
  
    end  
  
    if answer1 = team2 then do  
  
        cpu = team2  
  
    end  
  
end  
  
say 'who is the home team?'  
  
pull hometeam  
  
Select  
  
    When hometeam = team1 then do  
  
        home = team1  
  
        away = team2
```

```
end
When hometeam = team2 then do
home = team2
away = team1
end
OTHERWISE DO
say 'No team selected, so home team will be chosen by the system.'
hometeam = random(1,2)
  if hometeam = 1 then do
    home = team1
    away = team2
  end
  if hometeam = 2 then do
    home = team2
    away = team1
  end
end
end
end
say 'what time is this game?'
pull gametime
say 'what is the name of your league?'
pull lgame
say 'who is the sponsor for this game?'
pull sponsor
say 'What is the slogan for your sponsor?'
pull sponslogan
```

```
say 'Welcome to 'lgame
say 'Today we have a matchup of 'away 'vs' home 'at 'gametime
say 'sponsored by 'sponsor sponslogan
say 'PLAY BALL!'
say "
say "
do until inning > 6 & hmscore \= awscore
say 'Top 'inning
say away awscore home hmscore
say "
call HFAWAY
Say 'Mid 'inning
say "
say away awscore home hmscore
say "
say 'Bottom 'inning
say "
call HFHOME
Say 'End 'inning
say "
say away awscore home hmscore
say "
inning = inning + 1
END
say away awscore home hmscore 'Final'
say "
```

Select

When awscore > hmscore then do

say away 'wins! Final score: 'away awscore home hmscore

end

When hmscore > awscore then do

say home 'win! Final score: 'away awscore home hmscore

end

Otherwise do

say hmscore 'and' awscore 'tied. Final: 'away awscore home hmscore

end

end

DONE:

EXIT

HFAWAY:

O = 3

OUTS = 0

OB = 0

S = 0

B = 0

Do while O > 0

res = 0

say "

say away awscore home hmscore

say "

say 'OUTS=' OUTS 'B=' B 'S=' S 'Onbase=' OB

say "

say 'PITCHER: Select your pitch.'

say 'FB = 1 CB = 2 SL = 3 CH = 4'

say 'Then append your location - ex. 1U:'

say 'Right = R Left = L Down = D Up = U'

say "

if cpu = home then do

CPUpitch = '1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16'

Parse var CPUpitch U1 U2 U3 U4 D1 D2 D3 D4 R1 R2 R3 R4 L1 L2 L3 L4

CPUP = Random(1,16)

say cpu 'has the pitch selected'

Select

When CPUP = U1 Then Pitch = '1U'

When CPUP = U2 Then Pitch = '2U'

When CPUP = U3 Then Pitch = '3U'

When CPUP = U4 Then Pitch = '4U'

When CPUP = D1 Then Pitch = '1D'

When CPUP = D2 Then Pitch = '2D'

When CPUP = D3 Then Pitch = '3D'

When CPUP = D4 Then Pitch = '4D'

When CPUP = R1 Then Pitch = '1R'

When CPUP = R2 Then Pitch = '2R'

When CPUP = R3 Then Pitch = '3R'

When CPUP = R4 Then Pitch = '4R'

When CPUP = L1 Then Pitch = '1L'

When CPUP = L2 Then Pitch = '2L'

When CPUP = L3 Then Pitch = '3L'

```
    When CPUP = L4 Then Pitch = '4L'
    Otherwise nop
end
end
if cpu = away then do
pull Pitch
end
If cpu = " then do
pull Pitch
end
If POS('1',Pitch) > 0 Then do
Ptype = 'Fastball'
Clock = Random(90,100)
end
If POS('2',Pitch) > 0 Then do
Ptype = 'Curveball'
Clock = Random(70,79)
end
If POS('3',Pitch) > 0 Then do
Ptype = 'Slider'
Clock = Random(80,90)
end
If POS('4',Pitch) > 0 Then do
Ptype = 'Changeup'
Clock = Random(75,85)
end
```

```
If POS('U',Pitch) > 0 Then do
Loc = 'Up'
end
If POS('D',Pitch) > 0 Then do
Loc = 'Down'
end
If POS('R',Pitch) > 0 Then do
Loc = 'Right'
end
If POS('L',Pitch) > 0 Then do
Loc = 'Left'
end
Hint = '1 2 3 4 5 6'
Parse var Hint one two three speed pitchtype location
Rhint = Random(1,6)
if Rhint = speed then do
say clock'MPH'
end
if Rhint = pitchtype then do
say Ptype
end
if Rhint = location then do
say Loc
end
BKvalue = '1 2 3'
Parse var BKvalue BI K K1
```

```
Ballk = Random(1,3)
if Ballk = BI then do
  Ballslc = '1 2'
  Parse var Ballslc ba1 Ballmiss
  Ballnum = Random(1,2)
  If Ballnum = Ballmiss then do
    if Loc = 'Down' then do
      Say 'Ball in the dirt.'
    end
    if Loc = 'Up' then do
      say 'Ball up too high.'
    end
    if Loc = 'Right' then do
      say 'Ball way off the plate.'
    end
    if Loc = 'Left' then do
      say 'Ball way off the plate.'
    end
  end
end
end
If Pitch = 'LEAVE' then signal DONE
say "
say 'BATTER: Select your guess pitch.'
```



say 'FB = 1 CB = 2 SL = 3 CH = 4'

say 'Then append your swing location - ex. 1U:'

say 'Right = R Left = L Down = D Up = U'

say "

if cpu = away then do

CPUSwng = '1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16'

Parse var CPUSwng U1 U2 U3 U4 D1 D2 D3 D4 R1 R2 R3 R4 L1 L2 L3 L4

CPUS = Random(1,16)

Noswing = 0

CPUNS = Random(0,1)

if CPUNS = Noswing then do

Say cpu 'takes pitch.'

Swing = "

CPUS = 0

END

Select

When CPUS = U1 Then Swing = '1U'

When CPUS = U2 Then Swing = '2U'

When CPUS = U3 Then Swing = '3U'

When CPUS = U4 Then Swing = '4U'

When CPUS = D1 Then Swing = '1D'

When CPUS = D2 Then Swing = '2D'

When CPUS = D3 Then Swing = '3D'

When CPUS = D4 Then Swing = '4D'

When CPUS = R1 Then Swing = '1R'

When CPUS = R2 Then Swing = '2R'

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When CPUS = R3 Then Swing = '3R'
When CPUS = R4 Then Swing = '4R'
When CPUS = L1 Then Swing = '1L'
When CPUS = L2 Then Swing = '2L'
When CPUS = L3 Then Swing = '3L'
When CPUS = L4 Then Swing = '4L'
Otherwise nop
end
end
if cpu = home then do
pull Swing
end
If cpu = " then do
pull Swing
end
say "
say PType Loc Clock'MPH' 'Pitch =' Pitch 'Swing =' Swing
say "
If Swing = 'LEAVE' then signal DONE
Actnum = '1 2 3 4 5 6 7 8 9 10'
Parse var Actnum HR B3 B2 B1 Foul GO FLO SWS SWS2 SWS3
Match = '1U 2U 3U 4U 1D 2D 3D 4D 1R 2R 3R 4R 1L 2L 3L 4L'
ODD1 = Random(1,7)
ODD2 = Random(3,9)
ODD3 = Random(4,10)
IF Ballk = BI then do

```

ODD1 = Random(3,9)

ODD2 = Random(4,10)

ODD3 = Random(5,10)

end

Select

When Pitch = Swing Then do

Res = ODD1

end

When Substr(Pitch,1,1) = Substr(Swing,1,1) Then do

Res = ODD2

end

When Substr(Pitch,2) = Substr(Swing,2) Then do

Res = ODD2

end

When POS(Swing,Match) > 0 Then do

if Pitch \= Swing then do

Res = ODD3

end

end

When POS(Swing,Match) = 0 then do

If Ballk = BI then do

B = B + 1

Say 'ball'

END

If B = 4 then do

Say 'Ball 4, Take your base.'

OB = OB + 1

B = 0

S = 0

END

IF OB = 4 then do

OB = OB - 1

awscore = awwscore + 1

say 'Bases loaded walk!'

say '1 run scored!'

END

If Ballk = K Then do

S = S + 1

If S < 3 then do

Say 'Called Strike!'

End

If S = 3 Then do

say 'Strike 3 called, you're out!'

O = O - 1

OUTS = OUTS + 1

S = 0

B = 0

END

END

If Ballk = K1 Then do

S = S + 1

If S < 3 then do

Say 'Called Strike!'

End

If S = 3 Then do

say 'Strike 3 called, you"re out!'

O = O - 1

OUTS = OUTS + 1

S = 0

B = 0

END

END

END

Otherwise nop

END

If res = HR Then call HOMERUNA

If res = B3 Then call TRIPLEA

If res = B2 Then call DOUBLEA

If res = B1 Then call SINGLEA

If res = Foul Then call FOULBALLA

If res = GO Then call GROUNDOUTA

If res = FLO Then call FLYOUTA

If res = SWS Then call SWINGKA

If res = SWS2 Then call SWINGKA

If res = SWS3 Then call SWINGKA

END

return

HOMERUNA:

If OB = 3 then say '\*\*\*GRAND SLAM\*\*\*'

If OB = 2 then say '\*\*\*3 Run HR\*\*\*'

If OB = 1 then say '\*\*\*2 Run HR\*\*\*'

If OB = 0 then say '\*\*\*Solo HR\*\*\*'

OB = OB + 1

Say OB 'Run(s) have scored'

awscore = awscore + OB

OB = OB - OB

B = 0

S = 0

Return

TRIPLEA:

Say '\*\*\*TRIPLE\*\*\*'

Say OB 'Run(s) have scored'

awscore = awscore + OB

OB = OB - OB

OB = OB + 1

Say away awscore home hmscore

B = 0

S = 0

return

DOUBLEA:

Say '\*\*\*DOUBLE\*\*\*'

Say OB 'Run(s) have scored'

awscore = awscore + OB

OB = OB - OB

OB = OB + 1

Say away awscore home hmscore

B = 0

S = 0

return

SINGLEA:

Say '\*\*\*SINGLE\*\*\*'

If OB = 2 then do

Say '1 Run(s) have scored'

OB = OB - 1

awscore = awscore + 1

Say away awscore home hmscore

END

If OB = 3 then do

Say '2 Run(s) have scored'

OB = OB - 2

awscore = awscore + 2

Say away awscore home hmscore

END

OB = OB +1

B = 0

S = 0

return

FOULBALLA:

Say 'Foul Ball'

S = S + 1

If  $S = 3$  then do

$S = S - 1$

END

return

GROUNDOUTA:

$O = O - 1$

$OUTS = OUTS + 1$

Say 'Groundout.' OUTS 'out(s).'

$S = 0$

$B = 0$

Return

FLYOUTA:

$O = O - 1$

$OUTS = OUTS + 1$

Say 'Flyout.' OUTS 'out(s).'

$S = 0$

$B = 0$

Return

SWINGKA:

$S = S + 1$

If  $S < 3$  then do

Say 'Swing and a Miss!'

End

If  $S = 3$  Then do

say 'Swing and a miss! Strike 3!'

$O = O - 1$



```
    OUTS = OUTS + 1
    S = 0
    B = 0
    END
return
HFHOME:
    O = 3
    OUTS = 0
    OB = 0
    S = 0
    B = 0
    Do while O > 0
    res = 0
    say "
    say away awscore home hmscore
    say "
    say 'OUTS=' OUTS 'B=' B 'S=' S 'Onbase=' OB
    say "
    say 'PITCHER: Select your pitch.'
    say 'FB = 1 CB = 2 SL = 3 CH = 4'
    say 'Then append your location - ex. 1U:'
    say 'Right = R Left = L Down = D Up = U'
    say "
    if cpu = away then do
    CPUptch = '1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16'
    Parse var CPUptch U1 U2 U3 U4 D1 D2 D3 D4 R1 R2 R3 R4 L1 L2 L3 L4
```

CPUP = Random(1,16)

say cpu 'has the pitch selected'

Select

When CPUP = U1 Then Pitch = '1U'

When CPUP = U2 Then Pitch = '2U'

When CPUP = U3 Then Pitch = '3U'

When CPUP = U4 Then Pitch = '4U'

When CPUP = D1 Then Pitch = '1D'

When CPUP = D2 Then Pitch = '2D'

When CPUP = D3 Then Pitch = '3D'

When CPUP = D4 Then Pitch = '4D'

When CPUP = R1 Then Pitch = '1R'

When CPUP = R2 Then Pitch = '2R'

When CPUP = R3 Then Pitch = '3R'

When CPUP = R4 Then Pitch = '4R'

When CPUP = L1 Then Pitch = '1L'

When CPUP = L2 Then Pitch = '2L'

When CPUP = L3 Then Pitch = '3L'

When CPUP = L4 Then Pitch = '4L'

Otherwise nop

end

end

if cpu = home then do

pull Pitch

end

If cpu = " then do

```
pull Pitch
end
If POS('1',Pitch) > 0 Then do
Ptype = 'Fastball'
Clock = Random(90,100)
end
If POS('2',Pitch) > 0 Then do
Ptype = 'Curveball'
Clock = Random(70,79)
end
If POS('3',Pitch) > 0 Then do
Ptype = 'Slider'
Clock = Random(80,90)
end
If POS('4',Pitch) > 0 Then do
Ptype = 'Changeup'
Clock = Random(75,85)
end
If POS('U',Pitch) > 0 Then do
Loc = 'Up'
end
If POS('D',Pitch) > 0 Then do
Loc = 'Down'
end
If POS('R',Pitch) > 0 Then do
Loc = 'Right'
```

```
end
If POS('L',Pitch) > 0 Then do
  Loc = 'Left'
end
Hint = '1 2 3 4 5 6'
Parse var Hint one two three speed pitchtype location
Rhint = Random(1,6)
if Rhint = speed then do
  say clock'MPH'
end
if Rhint = pitchtype then do
  say Ptype
end
if Rhint = location then do
  say Loc
end
BKvalue = '1 2 3'
Parse var BKvalue BI K K1
Ballk = Random(1,3)
if Ballk = BI then do
  Ballslc = '1 2'
  Parse var Ballslc ba1 Ballmiss
  Ballnum = Random(1,2)
  If Ballnum = Ballmiss then do
    if Loc = 'Down' then do
```

```
Say 'Ball in the dirt.'

end

if Loc = 'Up' then do

say 'Ball up too high.'

end

if Loc = 'Right' then do

say 'Ball way off the plate.'

end

if Loc = 'Left' then do

say 'Ball way off the plate.'

end

end

end

If Pitch = 'LEAVE' then signal DONE

say "

say 'BATTER: Select your guess pitch.'

say 'FB = 1 CB = 2 SL = 3 CH = 4'

say 'Then append your swing location - ex. 1U:'

say 'Right = R Left = L Down = D Up = U'

say "

if cpu = home then do

CPUSwng = '1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16'

Parse var CPUswng U1 U2 U3 U4 D1 D2 D3 D4 R1 R2 R3 R4 L1 L2 L3 L4

CPUS = Random(1,16)
```

Noswing = 0

CPUNS = Random(0,1)

if CPUNS = Noswing then do

Say cpu 'takes pitch.'

Swing = "

CPUS = 0

END

Select

When CPUS = U1 Then Swing = '1U'

When CPUS = U2 Then Swing = '2U'

When CPUS = U3 Then Swing = '3U'

When CPUS = U4 Then Swing = '4U'

When CPUS = D1 Then Swing = '1D'

When CPUS = D2 Then Swing = '2D'

When CPUS = D3 Then Swing = '3D'

When CPUS = D4 Then Swing = '4D'

When CPUS = R1 Then Swing = '1R'

When CPUS = R2 Then Swing = '2R'

When CPUS = R3 Then Swing = '3R'

When CPUS = R4 Then Swing = '4R'

When CPUS = L1 Then Swing = '1L'

When CPUS = L2 Then Swing = '2L'

When CPUS = L3 Then Swing = '3L'

When CPUS = L4 Then Swing = '4L'

Otherwise nop

end

```

end
if cpu = away then do
pull Swing
end
If cpu = " then do
pull Swing
end
say "
say PType Loc Clock'MPH' 'Pitch =' Pitch 'Swing =' Swing
say "
If Swing = 'LEAVE' then signal DONE
Actnum = '1 2 3 4 5 6 7 8 9 10'
Parse var Actnum HR B3 B2 B1 Foul GO FLO SWS SWS2 SWS3
Match = '1U 2U 3U 4U 1D 2D 3D 4D 1R 2R 3R 4R 1L 2L 3L 4L'
ODD1 = Random(1,7)
ODD2 = Random(3,9)
ODD3 = Random(4,10)
IF Ballk = BI then do
ODD1 = Random(3,9)
ODD2 = Random(4,10)
ODD3 = Random(5,10)
end
Select
When Pitch = Swing Then do
Res = ODD1
end

```

When Substr(Pitch,1,1) = Substr(Swing,1,1) Then do

Res = ODD2

end

When Substr(Pitch,2) = Substr(Swing,2) Then do

Res = ODD3

end

When POS(Swing,Match) > 0 Then do

if Pitch \= Swing then do

Res = ODD3

end

end

When POS(Swing,Match) = 0 then do

If Ballk = BI then do

B = B + 1

Say 'ball'

END

If B = 4 then do

Say 'Ball 4, Take your base.'

OB = OB + 1

B = 0

S = 0

END

IF OB = 4 then do

OB = OB - 1

hmscore = hmscore + 1

say 'Bases loaded walk!'



say '1 run scored!'

END

If Ballk = K Then do

S = S + 1

If S < 3 then do

Say 'Called Strike!'

End

If S = 3 Then do

say 'Strike 3 called, you"re out!'

O = O - 1

OUTS = OUTS + 1

S = 0

B = 0

END

END

If Ballk = K1 Then do

S = S + 1

If S < 3 then do

Say 'Called Strike!'

End

If S = 3 Then do

say 'Strike 3 called, you"re out!'

O = O - 1

OUTS = OUTS + 1

S = 0

B = 0

END

END

END

Otherwise nop

END

If res = HR Then call HOMERUNH

If res = B3 Then call TRIPLEH

If res = B2 Then call DOUBLEH

If res = B1 Then call SINGLEH

If res = Foul Then call FOULBALLH

If res = GO Then call GROUNDOUTH

If res = FLO Then call FLYOUTH

If res = SWS Then call SWINGKH

If res = SWS1 then call SWINGKH

If res = SWS2 then call SWINGKH

END

return

HOMERUNH:

If OB = 3 then say '\*\*\*GRAND SLAM\*\*\*'

If OB = 2 then say '\*\*\*3 Run HR\*\*\*'

If OB = 1 then say '\*\*\*2 Run HR\*\*\*'

If OB = 0 then say '\*\*\*Solo HR\*\*\*'

OB = OB + 1

Say OB 'Run(s) have scored'

hmscore = hmscore + OB

OB = OB - OB

B = 0

S = 0

Return

TRIPLEH:

Say '\*\*\*TRIPLE\*\*\*'

Say OB 'Run(s) have scored'

hmscore = hmscore + OB

OB = OB - OB

OB = OB + 1

Say away awscore home hmscore

B = 0

S = 0

return

DOUBLEH:

Say '\*\*\*DOUBLE\*\*\*'

Say OB 'Run(s) have scored'

hmscore = hmscore + OB

OB = OB - OB

OB = OB + 1

Say away awscore home hmscore

B = 0

S = 0

return

SINGLEH:

Say '\*\*\*SINGLE\*\*\*'

If OB = 2 then do

Say '1 Run(s) have scored'

$OB = OB - 1$

$hmscore = hmscore + 1$

Say away awscore home hmscore

END

If  $OB = 3$  then do

Say '2 Run(s) have scored'

$OB = OB - 2$

$hmscore = hmscore + 2$

Say away awscore home hmscore

END

$OB = OB + 1$

$B = 0$

$S = 0$

return

FOULBALLH:

Say 'Foul Ball'

$S = S + 1$

If  $S = 3$  then do

$S = S - 1$

END

return

GROUNDOUTH:

$O = O - 1$

$OUTS = OUTS + 1$

Say 'Groundout.' OUTS 'out(s).'

S = 0

B = 0

Return

FLYOUTH:

O = O - 1

OUTS = OUTS + 1

Say 'Flyout.' OUTS 'out(s).'

S = 0

B = 0

Return

SWINGKH:

S = S + 1

If S < 3 then do

Say 'Swing and a Miss!'

End

    If S = 3 Then do

        say 'Swing and a miss! Strike 3!'

    O = O - 1

    OUTS = OUTS + 1

    S = 0

    B = 0

    END

return