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In [70]:

```
using CSV, DataFrames, GLM, RegressionTables, Gadfly, Plots, RDatasets, BoxCoxTrans, Statistics
```

In [71]:

```
# Enable printing of 1000 columns
ENV["COLUMNS"] = 1000
```

Out[71]:

```
1000
```

In [72]:

```
Hitters = dataset("ISLR", "Hitters")
```

Out[72]:

```
322 rows × 20 columns
```

	AtBat	Hits	HmRun	Runs	RBI	Walks	Years	CAtBat	CHits	CHmRun	CRuns	CRBI	CWalks	League	Division	PutOuts	Assists	EI
	Int32	Int32	Int32	Int32	Int32	Int32	Cat...	Cat...	Int32	Int32	I							
1	293	66	1	30	29	14	1	293	66	1	30	29	14	A	E	446	33	
2	315	81	7	24	38	39	14	3449	835	69	321	414	375	N	W	632	43	
3	479	130	18	66	72	76	3	1624	457	63	224	266	263	A	W	880	82	
4	496	141	20	65	78	37	11	5628	1575	225	828	838	354	N	E	200	11	
5	321	87	10	39	42	30	2	396	101	12	48	46	33	N	E	805	40	
6	594	169	4	74	51	35	11	4408	1133	19	501	336	194	A	W	282	421	
7	185	37	1	23	8	21	2	214	42	1	30	9	24	N	E	76	127	
8	298	73	0	24	24	7	3	509	108	0	41	37	12	A	W	121	283	
9	323	81	6	26	32	8	2	341	86	6	32	34	8	N	W	143	290	
10	401	92	17	49	66	65	13	5206	1332	253	784	890	866	A	E	0	0	
11	574	159	21	107	75	59	10	4631	1300	90	702	504	488	A	E	238	445	
12	202	53	4	31	26	27	9	1876	467	15	192	186	161	N	W	304	45	

Homework4

	AtBat	Hits	HmRun	Runs	RBI	Walks	Years	CAtBat	CHits	CHmRun	CRuns	CRBI	CWalks	League	Division	PutOuts	Assists	Ei
	Int32	Int32	Int32	Int32	Int32	Int32	Cat...	Cat...	Int32	Int32	I							
13	418	113	13	48	61	47	4	1512	392	41	205	204	203	N	E	211	11	
14	239	60	0	30	11	22	6	1941	510	4	309	103	207	A	E	121	151	
15	196	43	7	29	27	30	13	3231	825	36	376	290	238	N	E	80	45	
16	183	39	3	20	15	11	3	201	42	3	20	16	11	A	W	118	0	
17	568	158	20	89	75	73	15	8068	2273	177	1045	993	732	N	W	105	290	
18	190	46	2	24	8	15	5	479	102	5	65	23	39	A	W	102	177	
19	407	104	6	57	43	65	12	5233	1478	100	643	658	653	A	W	912	88	
20	127	32	8	16	22	14	8	727	180	24	67	82	56	N	W	202	22	
21	413	92	16	72	48	65	1	413	92	16	72	48	65	N	E	280	9	
22	426	109	3	55	43	62	1	426	109	3	55	43	62	A	W	361	22	
23	22	10	1	4	2	1	6	84	26	2	9	9	3	A	W	812	84	
24	472	116	16	60	62	74	6	1924	489	67	242	251	240	N	W	518	55	
25	629	168	18	73	102	40	18	8424	2464	164	1008	1072	402	A	E	1067	157	
26	587	163	4	92	51	70	6	2695	747	17	442	198	317	A	E	434	9	
27	324	73	4	32	18	22	7	1931	491	13	291	108	180	N	E	222	3	
28	474	129	10	50	56	40	10	2331	604	61	246	327	166	N	W	732	83	
29	550	152	6	92	37	81	5	2308	633	32	349	182	308	N	W	262	329	
30	513	137	20	90	95	90	14	5201	1382	166	763	734	784	A	W	267	5	
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	

◀ ▶

In [73]:

```
println(size(Hitters))
```

(322, 20)

In [74]:

```
names(Hitters)
```

```
Out[74]: 20-element Vector{String}:
  "AtBat"
  "Hits"
  "HmRun"
  "Runs"
  "RBI"
  "Walks"
  "Years"
  "CAtBat"
  "CHits"
  "CHmRun"
  "CRuns"
  "CRBI"
  "CWalks"
  "League"
  "Division"
  "PutOuts"
  "Assists"
  "Errors"
  "Salary"
  "NewLeague"
```

```
In [75]: describe(Hitters)
```

```
Out[75]: 20 rows × 7 columns
```

	variable	mean	min	median	max	nmissing	eltype
	Symbol	Union... Any	Union... Any	Union... Any	Union... Any	Int64	Type
1	AtBat	380.929	16	379.5	687	0	Int32
2	Hits	101.025	1	96.0	238	0	Int32
3	HmRun	10.7702	0	8.0	40	0	Int32
4	Runs	50.9099	0	48.0	130	0	Int32
5	RBI	48.028	0	44.0	121	0	Int32
6	Walks	38.7422	0	35.0	105	0	Int32
7	Years	7.4441	1	6.0	24	0	Int32
8	CAtBat	2648.68	19	1928.0	14053	0	Int32

	variable	mean	min	median	max	nmissing	eltype
	Symbol	Union... Any	Any	Union... Any	Any	Int64	Type
9	CHits	717.571	4	508.0	4256	0	Int32
10	CHmRun	69.4907	0	37.5	548	0	Int32
11	CRuns	358.795	1	247.0	2165	0	Int32
12	CRBI	330.118	0	220.5	1659	0	Int32
13	CWalks	260.239	0	170.5	1566	0	Int32
14	League		A		N	0	CategoricalValue{String, UInt8}
15	Division		E		W	0	CategoricalValue{String, UInt8}
16	PutOuts	288.938	0	212.0	1378	0	Int32
17	Assists	106.913	0	39.5	492	0	Int32
18	Errors	8.04037	0	6.0	32	0	Int32
19	Salary	535.926	67.5	425.0	2460.0	59	Union{Missing, Float64}
20	NewLeague		A		N	0	CategoricalValue{String, UInt8}

(a) Identify the Variables

In [76]:

```
dropmissing!(Hitters, :"Salary");
describe(Hitters)
```

Out[76]: 20 rows × 7 columns

	variable	mean	min	median	max	nmissing	eltype
	Symbol	Union... Any	Any	Union... Any	Any	Int64	DataType
1	AtBat	403.643	19	413.0	687	0	Int32
2	Hits	107.829	1	103.0	238	0	Int32
3	HmRun	11.6198	0	9.0	40	0	Int32
4	Runs	54.7452	0	52.0	130	0	Int32

	variable	mean	min	median	max	nmissing	eltype
	Symbol	Union... Any	Union... Any	Union... Any	Int64		DataType
5	RBI	51.4867	0	47.0	121	0	Int32
6	Walks	41.1141	0	37.0	105	0	Int32
7	Years	7.31179	1	6.0	24	0	Int32
8	CAtBat	2657.54	19	1931.0	14053	0	Int32
9	CHits	722.186	4	516.0	4256	0	Int32
10	CHmRun	69.2395	0	40.0	548	0	Int32
11	CRuns	361.221	2	250.0	2165	0	Int32
12	CRBI	330.418	3	230.0	1659	0	Int32
13	CWalks	260.266	1	174.0	1566	0	Int32
14	League		A		N	0	CategoricalValue{String, UInt8}
15	Division		E		W	0	CategoricalValue{String, UInt8}
16	PutOuts	290.711	0	224.0	1377	0	Int32
17	Assists	118.76	0	45.0	492	0	Int32
18	Errors	8.59316	0	7.0	32	0	Int32
19	Salary	535.926	67.5	425.0	2460.0	0	Float64
20	NewLeague		A		N	0	CategoricalValue{String, UInt8}

In [77]:

```
using RCall
@rput Hitters
R"str(Hitters)"
```

```
'data.frame': 263 obs. of 20 variables:
 $ AtBat     : int  315 479 496 321 594 185 298 323 401 574 ...
 $ Hits      : int  81 130 141 87 169 37 73 81 92 159 ...
 $ HmRun     : int  7 18 20 10 4 1 0 6 17 21 ...
 $ Runs      : int  24 66 65 39 74 23 24 26 49 107 ...
 $ RBI       : int  38 72 78 42 51 8 24 32 66 75 ...
 $ Walks     : int  39 76 37 30 35 21 7 8 65 59 ...
 $ Years     : int  14 3 11 2 11 2 3 2 13 10 ...
```

```
$ CAtBat   : int  3449 1624 5628 396 4408 214 509 341 5206 4631 ...
$ CHits    : int  835 457 1575 101 1133 42 108 86 1332 1300 ...
$ CHmRun   : int  69 63 225 12 19 1 0 6 253 90 ...
$ CRuns    : int  321 224 828 48 501 30 41 32 784 702 ...
$ CRBI     : int  414 266 838 46 336 9 37 34 890 504 ...
$ CWalks   : int  375 263 354 33 194 24 12 8 866 488 ...
$ League   : Factor w/ 2 levels "A","N": 2 1 2 2 1 2 1 2 1 1 ...
$ Division : Factor w/ 2 levels "E","W": 2 2 1 1 2 1 2 2 1 1 ...
$ PutOuts  : int  632 880 200 805 282 76 121 143 0 238 ...
$ Assists  : int  43 82 11 40 421 127 283 290 0 445 ...
$ Errors   : int  10 14 3 4 25 7 9 19 0 22 ...
$ Salary   : num  475 480 500 91.5 750 ...
$ NewLeague: Factor w/ 2 levels "A","N": 2 1 2 2 1 1 1 2 1 1 ...
```

Out[77]:
RObject{NilSxp}
NULL

In [78]:

```
println("AtBat ---> ", typeof(Hitters.AtBat))
println("Hits ---> ", typeof(Hitters.Hits))
println("HmRuns ---> ", typeof(Hitters.HmRun))
println("Runs ---> ", typeof(Hitters.Runs))
println("RBI ---> ", typeof(Hitters.RBI))
println("Walks ---> ", typeof(Hitters.Walks))
println("Years ---> ", typeof(Hitters.Years))
println("CAtBat ---> ", typeof(Hitters.CAtBat))
println("CHits ---> ", typeof(Hitters.CHits))
println("CHmRun ---> ", typeof(Hitters.CHmRun))
println("CRuns ---> ", typeof(Hitters.CRuns))
println("CRBI ---> ", typeof(Hitters.CRBI))
println("CWalks ---> ", typeof(Hitters.CWalks))
println("League ---> ", typeof(Hitters.League))
println("Division ---> ", typeof(Hitters.Division))
println("PutOuts ---> ", typeof(Hitters.PutOuts))
println("Assists ---> ", typeof(Hitters.Assists))
println("Errors ---> ", typeof(Hitters.Errors))
println("Salary ---> ", typeof(Hitters.Salary))
println("NewLeague ---> ", typeof(Hitters.NewLeague))
```

```
AtBat ---> Vector{Int32}
Hits ---> Vector{Int32}
HmRuns ---> Vector{Int32}
Runs ---> Vector{Int32}
RBI ---> Vector{Int32}
Walks ---> Vector{Int32}
Years ---> Vector{Int32}
```

```
CAtBat ---> Vector{Int32}
CHits ---> Vector{Int32}
CHmRun ---> Vector{Int32}
CRuns ---> Vector{Int32}
CRBI ---> Vector{Int32}
CWalks ---> Vector{Int32}
League ---> CategoricalArrays.CategoricalVector{String, UInt8, String, CategoricalArrays.CategoricalValue{String, UInt8}, Union{}}
Division ---> CategoricalArrays.CategoricalVector{String, UInt8, String, CategoricalArrays.CategoricalValue{String, UInt8}, Union{}}
PutOuts ---> Vector{Int32}
Assists ---> Vector{Int32}
Errors ---> Vector{Int32}
Salary ---> Vector{Float64}
NewLeague ---> CategoricalArrays.CategoricalVector{String, UInt8, String, CategoricalArrays.CategoricalValue{String, UInt8}, Union{}}
```

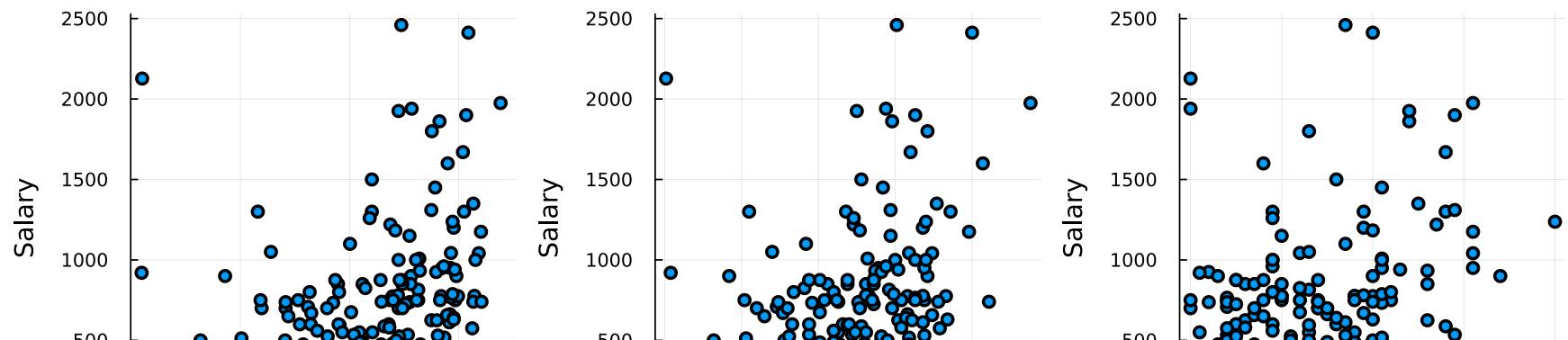
(b) Variables Association & Multiple Linear Model

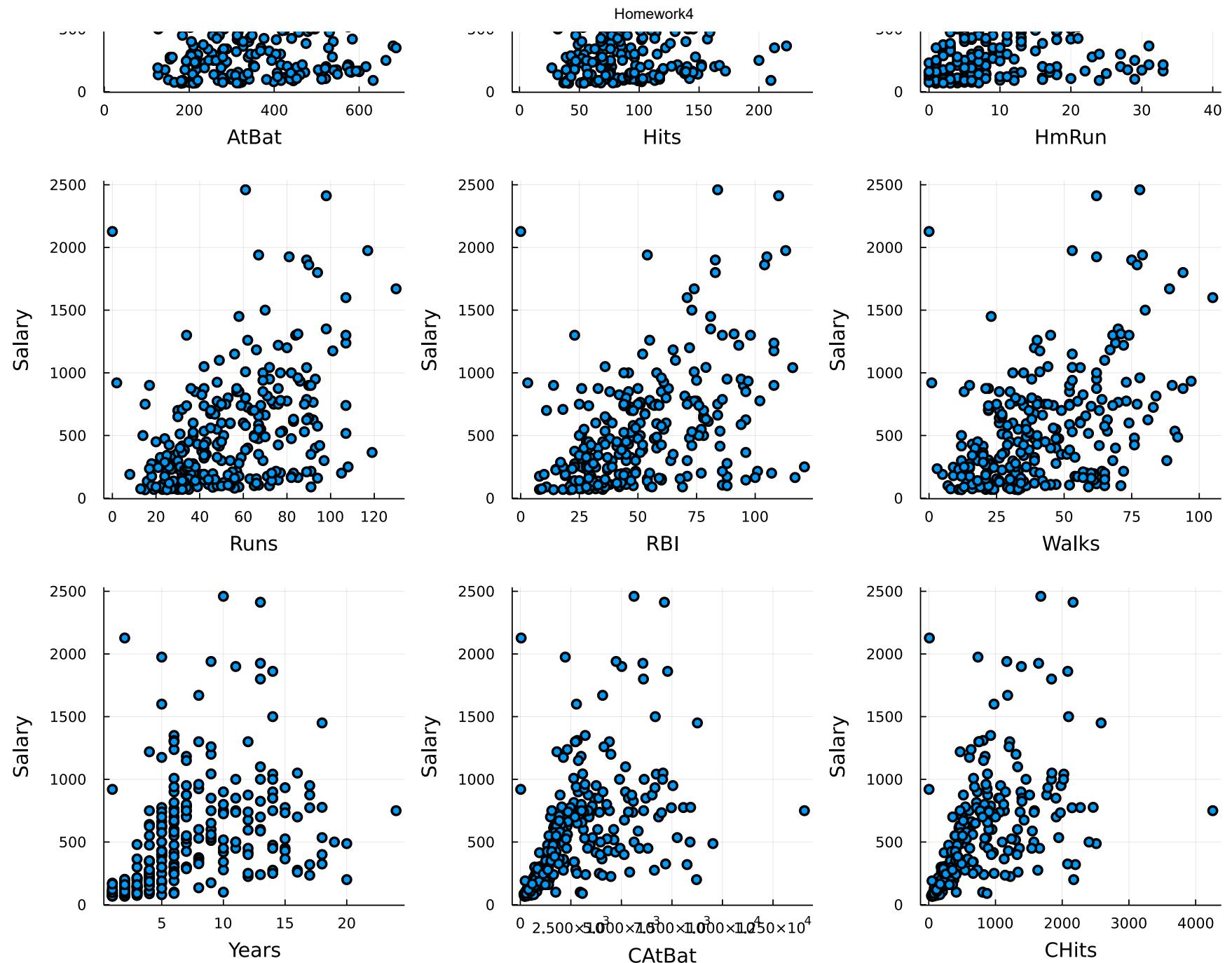
In [79]:

```
p1 = scatter(Hitters[!, :AtBat], Hitters[!, :Salary], xlabel="AtBat", ylabel="Salary");
p2 = scatter(Hitters[!, :Hits], Hitters[!, :Salary], xlabel="Hits", ylabel="Salary");
p3 = scatter(Hitters[!, :HmRun], Hitters[!, :Salary], xlabel="HmRun", ylabel="Salary");
p4 = scatter(Hitters[!, :Runs], Hitters[!, :Salary], xlabel="Runs", ylabel="Salary");
p5 = scatter(Hitters[!, :RBI], Hitters[!, :Salary], xlabel="RBI", ylabel="Salary");
p6 = scatter(Hitters[!, :Walks], Hitters[!, :Salary], xlabel="Walks", ylabel="Salary");
p7 = scatter(Hitters[!, :Years], Hitters[!, :Salary], xlabel="Years", ylabel="Salary");
p8 = scatter(Hitters[!, :CAtBat], Hitters[!, :Salary], xlabel="CAtBat", ylabel="Salary");
p9 = scatter(Hitters[!, :CHits], Hitters[!, :Salary], xlabel="CHits", ylabel="Salary");

Plots.plot(p1, p2, p3, p4, p5, p6, p7, p8, p9, layout = (3, 3), legend = false)
plot!(size=(1000, 1000))
```

Out[79]:





```
In [80]: println("Salary Vs AtBat::: ", Statistics.cor(Hitters.AtBat, Hitters.Salary))
```

```
println("Salary Vs Hits::: ", Statistics.cor(Hitters.Hits, Hitters.Salary))
println("Salary Vs HmRun::: ", Statistics.cor(Hitters.HmRun, Hitters.Salary))
println("Salary Vs Runs::: ", Statistics.cor(Hitters.Runs, Hitters.Salary))
println("Salary Vs RBI::: ", Statistics.cor(Hitters.RBI, Hitters.Salary))
println("Salary Vs Walks::: ", Statistics.cor(Hitters.Walks, Hitters.Salary))
println("Salary Vs Years::: ", Statistics.cor(Hitters.Years, Hitters.Salary))
println("Salary Vs CAtBat::: ", Statistics.cor(Hitters.CAtBat, Hitters.Salary))
println("Salary Vs CHits::: ", Statistics.cor(Hitters.CHits, Hitters.Salary))
```

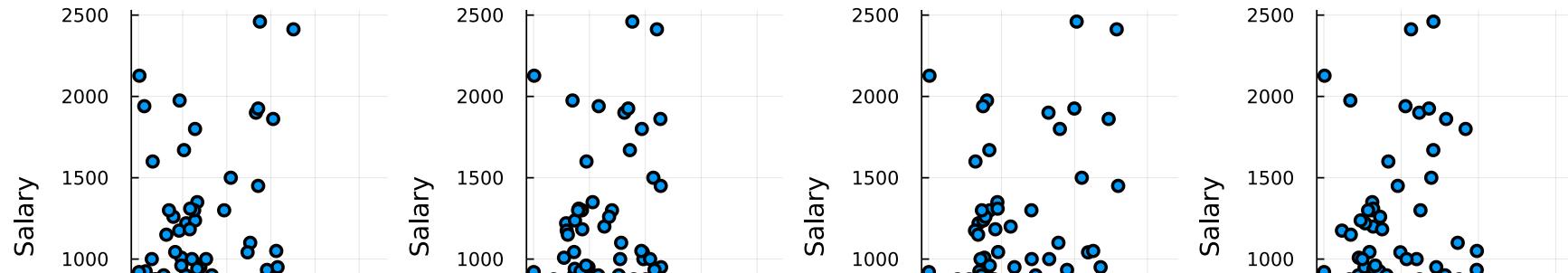
```
Salary Vs AtBat::: 0.3947709447597372
Salary Vs Hits::: 0.43867473786941086
Salary Vs HmRun::: 0.3430280781546636
Salary Vs Runs::: 0.4198555930198174
Salary Vs RBI::: 0.449457087940034
Salary Vs Walks::: 0.4438672601629796
Salary Vs Years::: 0.40065699438268604
Salary Vs CAtBat::: 0.5261353096237888
Salary Vs CHits::: 0.5489095590351706
```

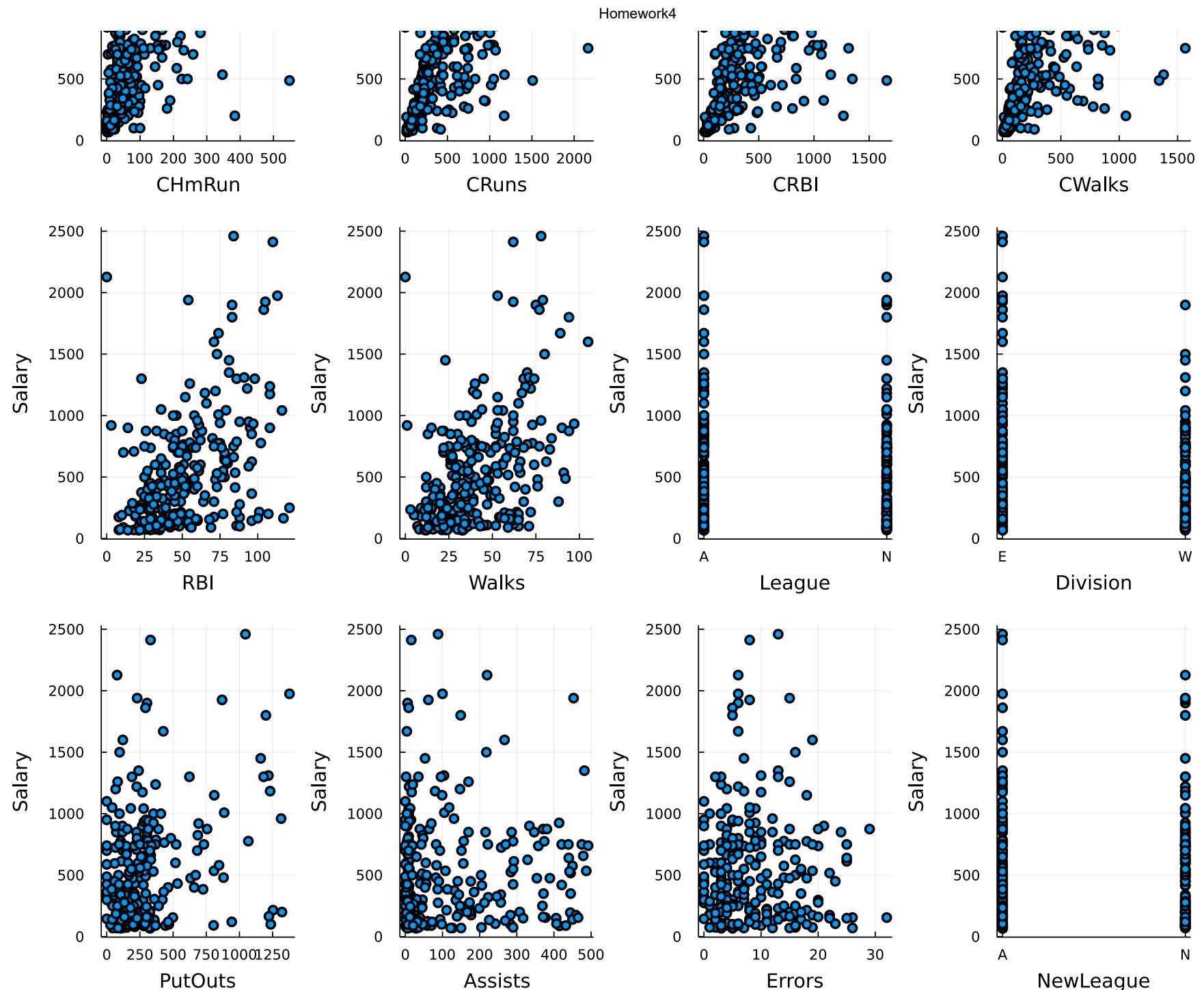
In [81]:

```
p10 = scatter(Hitters[!, :CHmRun], Hitters[!, :Salary], xlabel="CHmRun", ylabel="Salary");
p11 = scatter(Hitters[!, :CRuns], Hitters[!, :Salary], xlabel="CRuns", ylabel="Salary");
p12 = scatter(Hitters[!, :CRBI], Hitters[!, :Salary], xlabel="CRBI", ylabel="Salary");
p13 = scatter(Hitters[!, :CWalks], Hitters[!, :Salary], xlabel="CWalks", ylabel="Salary");
p14 = scatter(Hitters[!, :RBI], Hitters[!, :Salary], xlabel="RBI", ylabel="Salary");
p15 = scatter(Hitters[!, :Walks], Hitters[!, :Salary], xlabel="Walks", ylabel="Salary");
p16 = scatter(Hitters[!, :League], Hitters[!, :Salary], xlabel="League", ylabel="Salary");
p17 = scatter(Hitters[!, :Division], Hitters[!, :Salary], xlabel="Division", ylabel="Salary");
p18 = scatter(Hitters[!, :PutOuts], Hitters[!, :Salary], xlabel="PutOuts", ylabel="Salary");
p19 = scatter(Hitters[!, :Assists], Hitters[!, :Salary], xlabel="Assists", ylabel="Salary");
p20 = scatter(Hitters[!, :Errors], Hitters[!, :Salary], xlabel="Errors", ylabel="Salary");
p21 = scatter(Hitters[!, :NewLeague], Hitters[!, :Salary], xlabel="NewLeague", ylabel="Salary");

Plots.plot(p10, p11, p12, p13, p14, p15, p16, p17, p18, p19, p20, p21, layout = (3, 4), legend = false)
plot!(size=(1000, 1000))
```

Out[81]:





```
In [82]: println("Salary Vs CHmRun::: ", Statistics.cor(Hitters.CHmRun, Hitters.Salary))
println("Salary Vs CRuns::: ", Statistics.cor(Hitters.CRuns, Hitters.Salary))
println("Salary Vs CRBI::: ", Statistics.cor(Hitters.CRBI, Hitters.Salary))
println("Salary Vs CWalks::: ", Statistics.cor(Hitters.CWalks, Hitters.Salary))
println("Salary Vs PutOuts::: ", Statistics.cor(Hitters.PutOuts, Hitters.Salary))
println("Salary Vs Assists::: ", Statistics.cor(Hitters.Assists, Hitters.Salary))
println("Salary Vs Errors::: ", Statistics.cor(Hitters.Errors, Hitters.Salary))
```

```
Salary Vs CHmRun::: 0.5249305595435936
Salary Vs CRuns::: 0.5626777110048051
Salary Vs CRBI::: 0.5669656856176525
Salary Vs CWalks::: 0.48982203628068005
Salary Vs PutOuts::: 0.3004803555060053
Salary Vs Assists::: 0.025436135647346664
Salary Vs Errors::: -0.005400701500953189
```

The variables have some moderate linear association with the dependent variable. The variables "PutOuts", "Assists", "Errors" have relatively weaker linear association than others. The Plots and Correlation values both represent those interpretation.

Multiple Regression Model

```
In [83]: m1 = @formula(Salary ~ AtBat + Hits + HmRun + Runs + RBI + Walks + Years + CAtBat + CHits + CHmRun + CRUNS + CRBI + CWALKS + League + Division + PutOuts +
```

```
Out[83]: FormulaTerm
Response:
    Salary(unknown)
Predictors:
    AtBat(unknown)
    Hits(unknown)
    HmRun(unknown)
    Runs(unknown)
    RBI(unknown)
    Walks(unknown)
    Years(unknown)
    CAtBat(unknown)
    CHits(unknown)
    CHmRun(unknown)
    CRUNS(unknown)
    CRBI(unknown)
    CWALKS(unknown)
    League(unknown)
    Division(unknown)
```

PutOuts(unknown)
 Assists(unknown)
 Errors(unknown)
 NewLeague(unknown)

In [84]:

```
model1 = lm(m1, Hitters)
```

Out[84]:

```
StatsModels.TableRegressionModel{LinearModel{GLM.LmResp{Vector{Float64}}, GLM.DensePredChol{Float64, LinearAlgebra.CholeskyPivoted{Float64, Matrix{Float64}}}}, Matrix{Float64}}
```

Salary ~ 1 + AtBat + Hits + HmRun + Runs + RBI + Walks + Years + CAtBat + CHits + CHmRun + CRuns + CRBI + CWalks + League + Division + PutOuts + Assists + Errors + NewLeague

Coefficients:

	Coef.	Std. Error	t	Pr(> t)	Lower 95%	Upper 95%
(Intercept)	163.104	90.7785	1.80	0.0736	-15.7096	341.917
AtBat	-1.97987	0.633978	-3.12	0.0020	-3.22867	-0.731079
Hits	7.50077	2.37753	3.15	0.0018	2.81756	12.184
HmRun	4.33088	6.20145	0.70	0.4856	-7.88457	16.5463
Runs	-2.37621	2.98076	-0.80	0.4261	-8.24763	3.49521
RBI	-1.04496	2.60088	-0.40	0.6882	-6.1681	4.07818
Walks	6.23129	1.8285	3.41	0.0008	2.62955	9.83303
Years	-3.48905	12.4122	-0.28	0.7789	-27.9383	20.9602
CAtBat	-0.17134	0.135237	-1.27	0.2064	-0.437727	0.0950456
CHits	0.133991	0.674552	0.20	0.8427	-1.19472	1.46271
CHmRun	-0.172861	1.61724	-0.11	0.9150	-3.35845	3.01273
CRuns	1.4543	0.750458	1.94	0.0538	-0.0239274	2.93254
CRBI	0.807709	0.692619	1.17	0.2447	-0.556594	2.17201
CWalks	-0.811571	0.328083	-2.47	0.0141	-1.45782	-0.165322
League: N	62.5994	79.2614	0.79	0.4304	-93.5277	218.727
Division: W	-116.849	40.367	-2.89	0.0041	-196.363	-37.3355
PutOuts	0.281893	0.0774406	3.64	0.0003	0.129352	0.434433
Assists	0.371069	0.221199	1.68	0.0947	-0.0646425	0.806781
Errors	-3.36076	4.39163	-0.77	0.4449	-12.0113	5.28976
NewLeague: N	-24.7623	79.0026	-0.31	0.7542	-180.38	130.855

R-square value

In [85]:

```
# R Square value of the model
r2(model1)
```

```
Out[85]: 0.5461158619125323
```

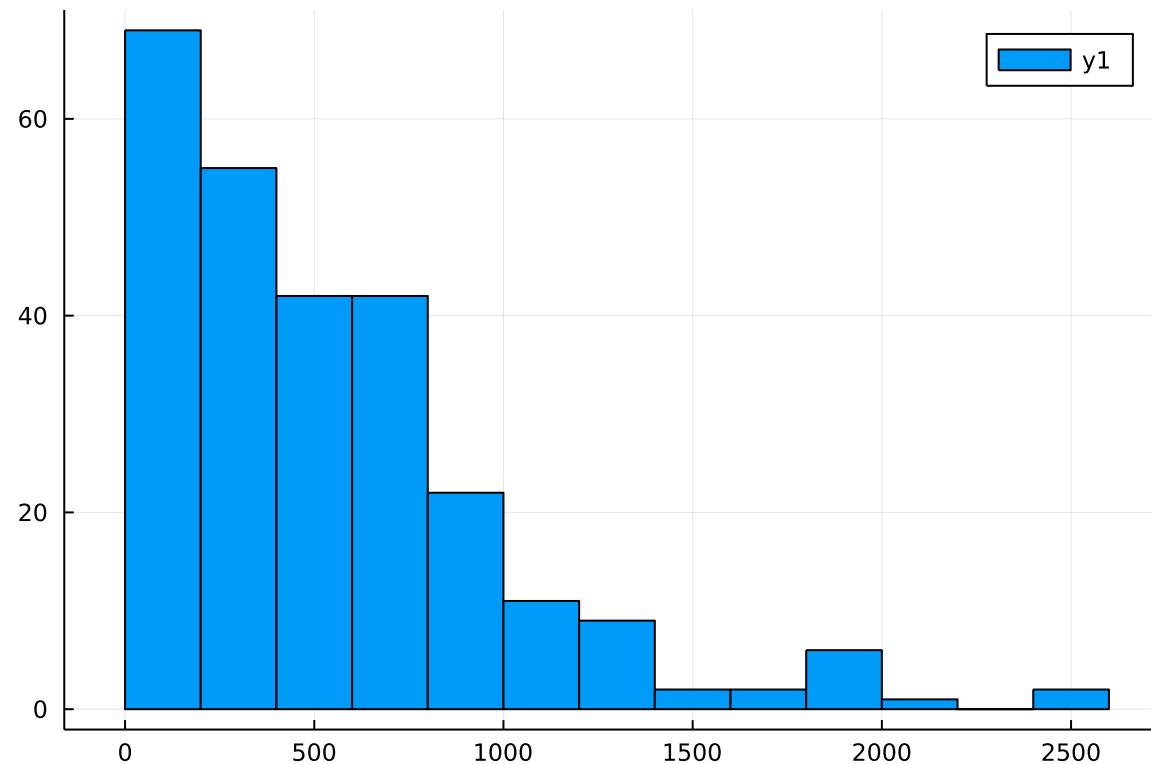
Coefficient Significance

```
In [86]: coef(model1)
```

```
Out[86]: 20-element Vector{Float64}:
163.10358775117987
-1.9798728999519999
7.500767544664079
4.330882897911241
-2.376209983954669
-1.0449619609758753
6.231286323075035
-3.489054263241972
-0.17134047309998213
0.133990961432787
-0.17286107024687594
1.4543049400843155
0.807708801703598
-0.811570910626846
62.59942303518597
-116.84924563687468
0.281892513358237
0.37106921041623425
-3.360760479856258
-24.762325108398404
```

```
In [87]: histogram(Hitters.Salary)
```

```
Out[87]:
```



(c) Assumption Checking

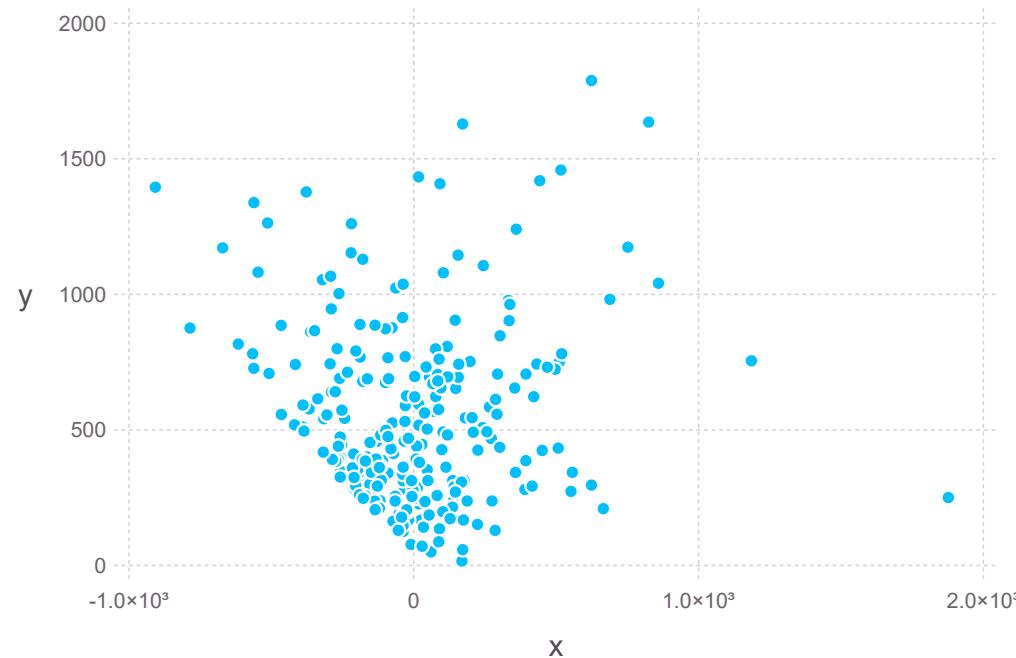
In [88]:

```
# predicted values
pred1 = predict(model1)
# residuals
red1 = Hitters[!, :Salary] - pred1;
```

In [89]:

```
# homoscedasticity Assumption
Gadfly.plot(x=red1,y=pred1, Geom.point)
```

Out[89]:

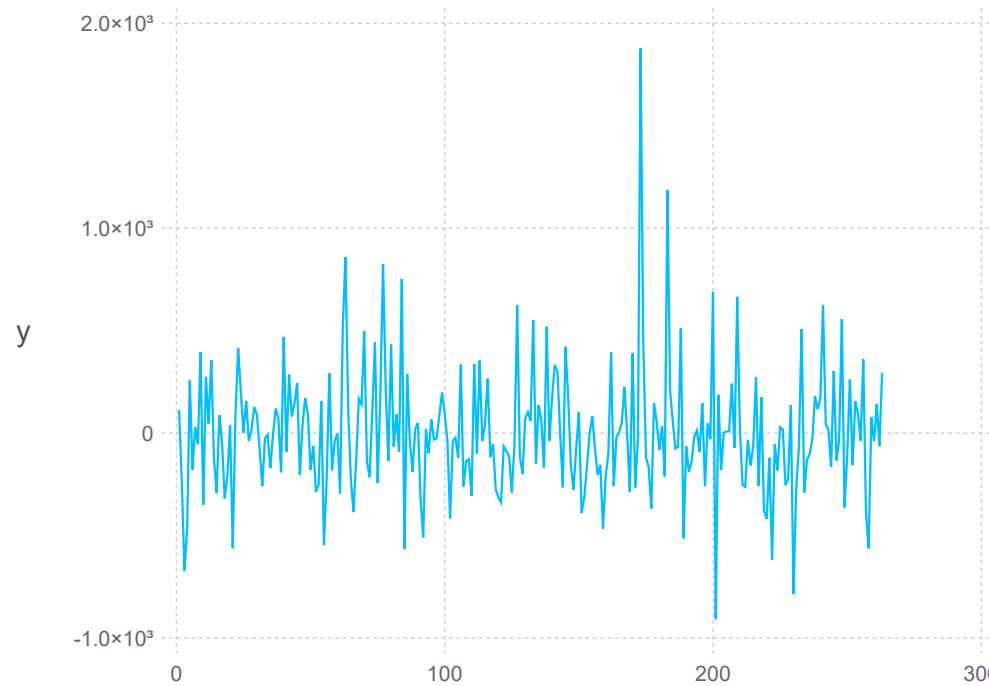


Here the variance is not same in different X value, so homoscedasticity assumption is not OK

In [90]:

```
# Independence Assumption  
Gadfly.plot(y=red1, Geom.line)
```

Out[90]:

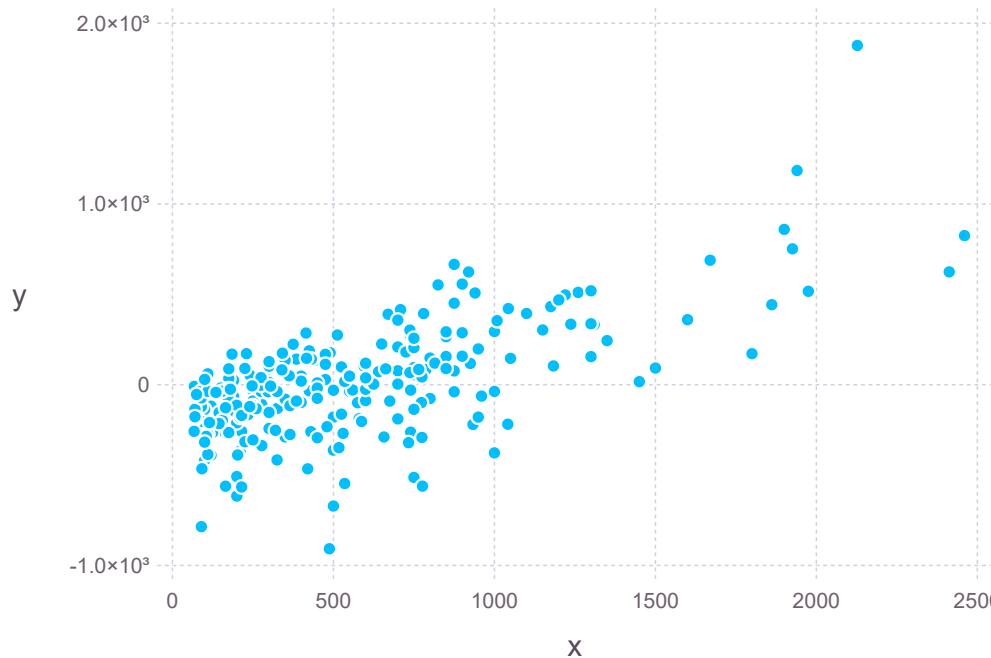


All the observations look random, So the independent assumption hold

In [91]:

```
# Exogeneity assumption  
Gadfly.plot(x = Hitters[!, :Salary], y=red1)
```

Out[91]:



We observed some pattern over the plot, so the Epsilon captured some information with was left out previously. It violating the assumption & might missed some independent variable

After adding more variables (not all) the homoscedasticity assumption behavior may be varying from the previous. The Box-Cox transformation would be a remedy for this.

(d) Box-Cox transformation

In [92]:

```
BoxCoxTrans.transform(Hitters.Salary);
BoxCoxTrans.lambda(Hitters.Salary)
```

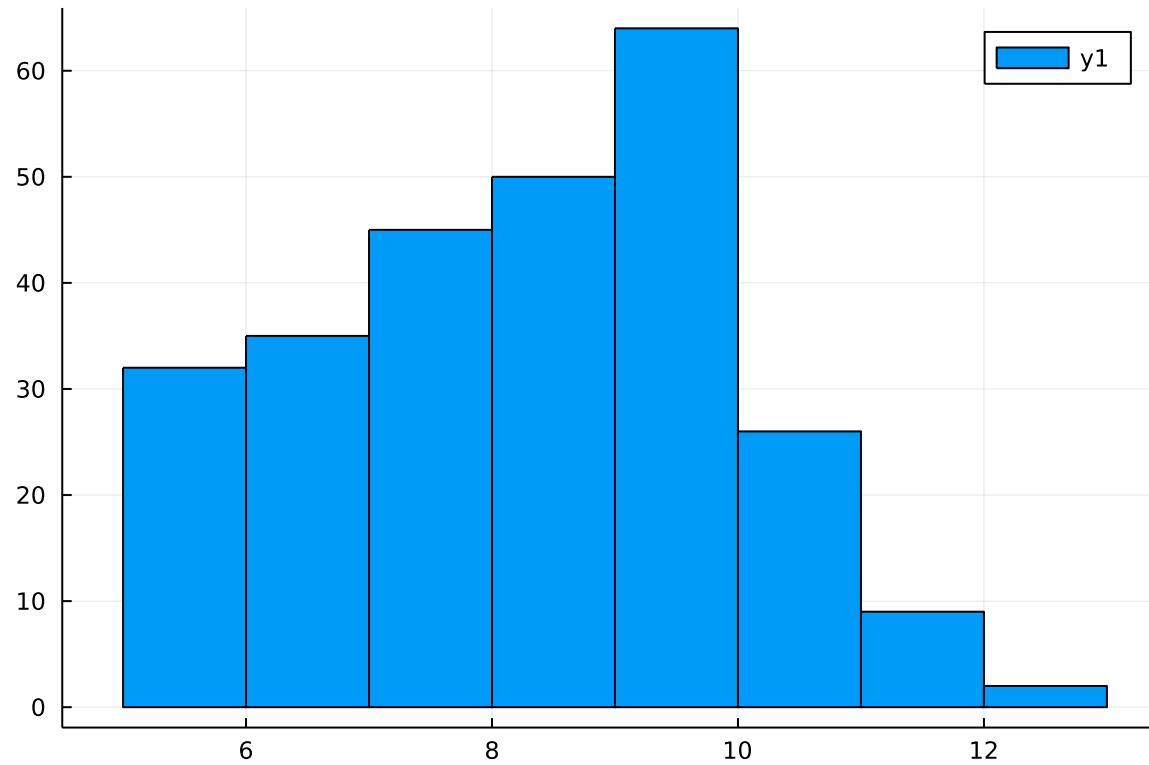
Out[92]:

```
(value = 0.1047769092162786, details = Results of Optimization Algorithm
 * Algorithm: Brent's Method
 * Search Interval: [-2.000000, 2.000000]
 * Minimizer: 1.047769e-01
```

```
* Minimum: 1.768043e+03
* Iterations: 29
* Convergence: max(|x - x_upper|, |x - x_lower|) <= 2*(1.5e-08|x|+2.2e-16): true
* Objective Function Calls: 30
```

In [93]: `histogram(BoxCoxTrans.transform(Hitters.Salary))`

Out[93]:

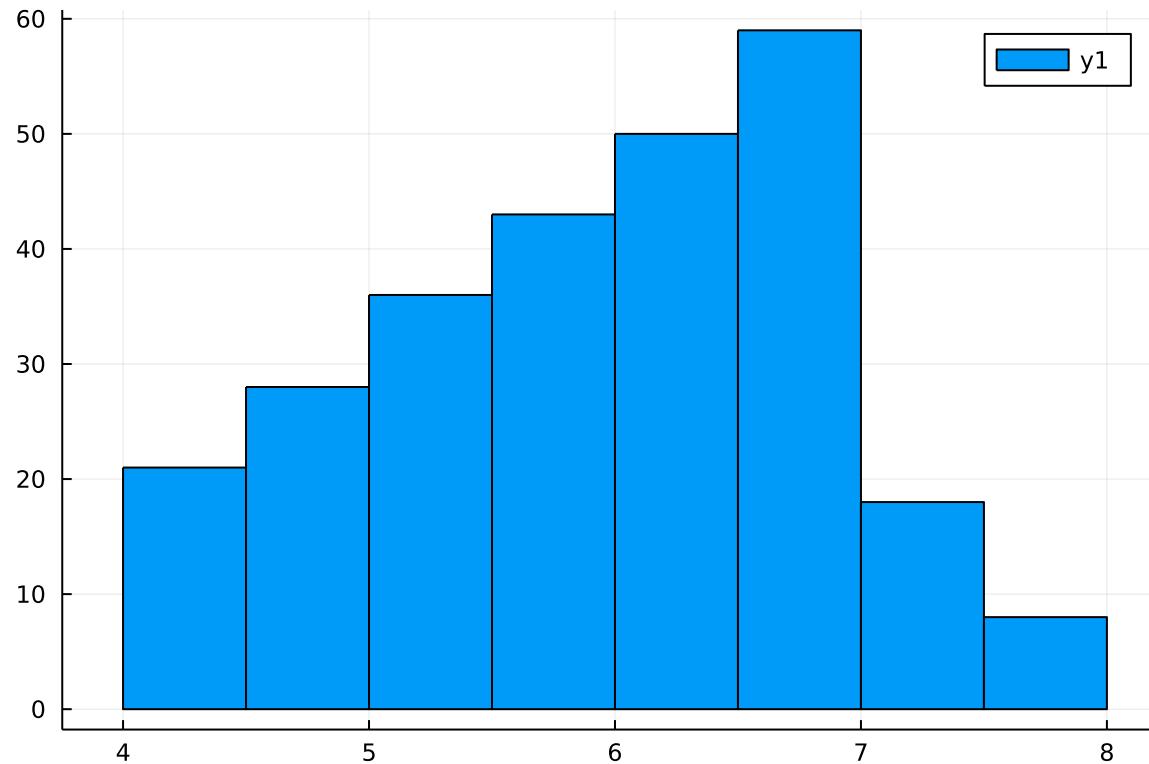


In [94]: `# optimal transformed
BoxCoxTrans.lambda(Hitters.Salary).value`

Out[94]: 0.1047769092162786

In [95]: `# for Lambda=0
histogram(BoxCoxTrans.transform(Hitters.Salary, 0.0))`

Out[95]:



In [96]:

```
## BoxCoxTrans  
  
Hitters[!, :bSalary] = BoxCoxTrans.transform(Hitters.Salary)
```

Out[96]:

```
263-element Vector{Float64}:  
8.660887957127562  
8.680872515017976  
8.75899130425591  
5.775464104517642  
9.553321423902302  
5.351515323156941  
5.918715840198406  
5.459583683716103  
10.335260662147785  
8.823755189534419  
8.806406626414132  
8.942687146819008  
9.415766711784233  
:
```

```
6.69925095062929  
10.686280115555707  
8.852797724275371  
8.942687146819008  
11.131230750370614  
6.21694261074324  
6.75170657867109  
9.415766711784233  
9.864276346810222  
8.264562495270784  
10.05372403301795  
10.137727361794724
```

In [97]: `names(Hitters)`

Out[97]: 21-element Vector{String}:

```
"AtBat"  
"Hits"  
"HmRun"  
"Runs"  
"RBI"  
"Walks"  
"Years"  
"CAtBat"  
"CHits"  
"CHmRun"  
"CRuns"  
"CRBI"  
"CWalks"  
"League"  
"Division"  
"PutOuts"  
"Assists"  
"Errors"  
"Salary"  
"NewLeague"  
"bSalary"
```

Fit the model

In [98]: `m2 = @formula(bSalary ~ AtBat + Hits + HmRun + Runs + RBI + Walks + Years + CAatBat + CHits + CHmRun + CRuns + CRBI + CWalks + League + Division + PutOuts)`

Out[98]: `FormulaTerm`

Response:

bSalary(unknown)

Predictors:

- AtBat(unknown)
- Hits(unknown)
- HmRun(unknown)
- Runs(unknown)
- RBI(unknown)
- Walks(unknown)
- Years(unknown)
- CAtBat(unknown)
- CHits(unknown)
- CHmRun(unknown)
- CRuns(unknown)
- CRBI(unknown)
- CWalks(unknown)
- League(unknown)
- Division(unknown)
- PutOuts(unknown)
- Assists(unknown)
- Errors(unknown)
- NewLeague(unknown)

In [99]:

```
model2 = lm(m2, Hitters)
```

Out[99]:

```
StatsModels.TableRegressionModel{LinearModel{GLM.LmResp{Vector{Float64}}, GLM.DensePredChol{Float64, LinearAlgebra.CholeskyPivoted{Float64, Matrix{Float64}}}}, Matrix{Float64}}
```

bSalary ~ 1 + AtBat + Hits + HmRun + Runs + RBI + Walks + Years + CAtBat + CHits + CHmRun + CRuns + CRBI + CWalks + League + Division + PutOuts + Assists + Errors + NewLeague

Coefficients:

	Coef.	Std. Error	t	Pr(> t)	Lower 95%	Upper 95%
(Intercept)	5.95814	0.325964	18.28	<1e-46	5.31606	6.60021
AtBat	-0.00570516	0.00227646	-2.51	0.0129	-0.0101893	-0.00122104
Hits	0.0249531	0.00853714	2.92	0.0038	0.00813685	0.0417693
HmRun	0.0222238	0.0222679	1.00	0.3193	-0.0216389	0.0660865
Runs	-0.00384939	0.0107032	-0.36	0.7194	-0.0249322	0.0172334
RBI	-0.00357435	0.00933911	-0.38	0.7023	-0.0219703	0.0148216
Walks	0.0209207	0.00656571	3.19	0.0016	0.00798774	0.0338537
Years	0.0917027	0.0445691	2.06	0.0407	0.00391159	0.179494
CAtBat	0.000158551	0.000485602	0.33	0.7443	-0.000797976	0.00111508

CHits	-0.000709841	0.00242215	-0.29	0.7697	-0.00548094	0.00406125
CHmRun	-0.00029111	0.0058071	-0.05	0.9601	-0.0117298	0.0111476
CRuns	0.0031234	0.00269471	1.16	0.2476	-0.00218457	0.00843137
CRBI	0.000543614	0.00248703	0.22	0.8272	-0.00435527	0.00544249
CWalks	-0.00278147	0.00117806	-2.36	0.0190	-0.005102	-0.000460954
League: N	0.491903	0.284608	1.73	0.0852	-0.0687111	1.05252
Division: W	-0.322793	0.144948	-2.23	0.0269	-0.608307	-0.037278
PutOuts	0.000672229	0.00027807	2.42	0.0164	0.000124493	0.00121996
Assists	0.00116364	0.000794271	1.47	0.1442	-0.000400899	0.00272817
Errors	-0.0213674	0.0157693	-1.36	0.1767	-0.0524293	0.00969452
NewLeague: N	-0.29638	0.283679	-1.04	0.2972	-0.855164	0.262404

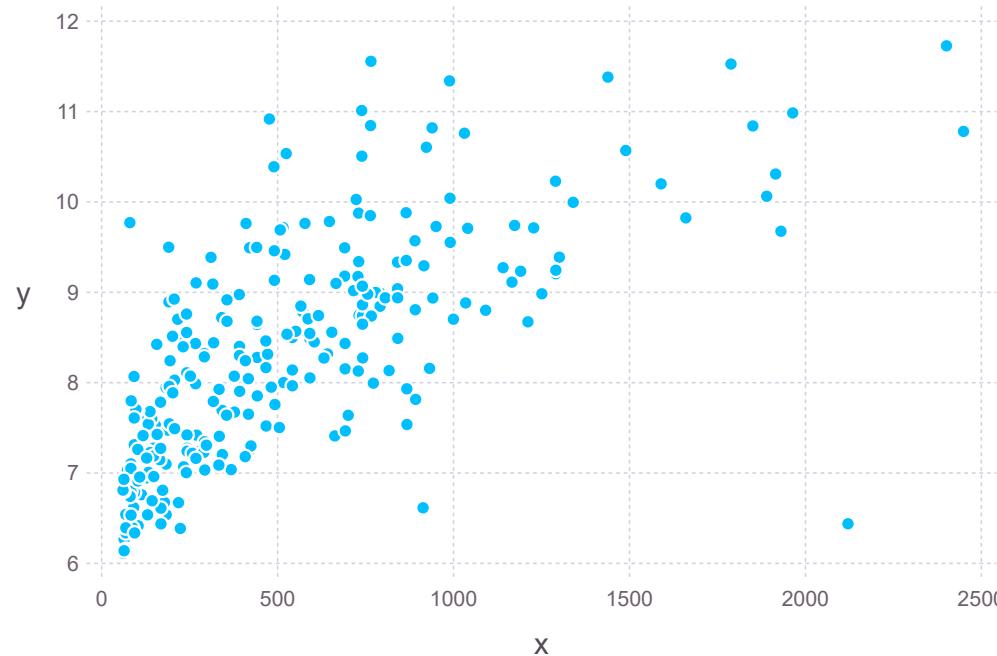
In [100...]

```
# predicted values
pred2 = predict(model2)
# residuals
red2 = Hitters[!, :Salary] - pred2;
```

In [101...]

```
# homoscedasticity Assumption
Gadfly.plot(x=red2,y=pred2, Geom.point)
```

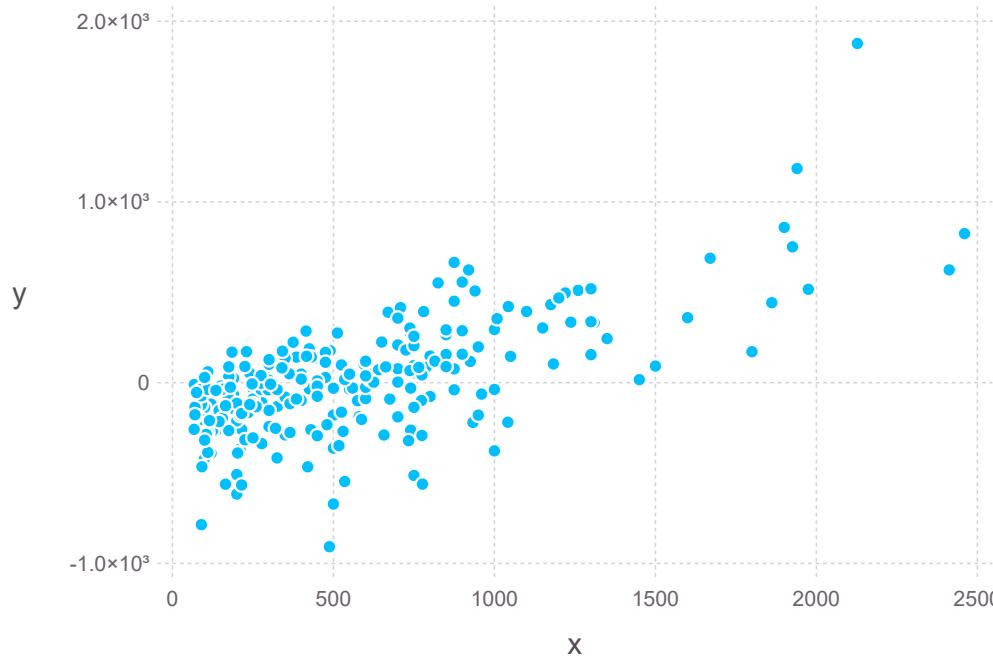
Out[101...]



In [102...]

```
# Exogeneity assumption  
Gadfly.plot(x = Hitters[!, :Salary], y=red1)
```

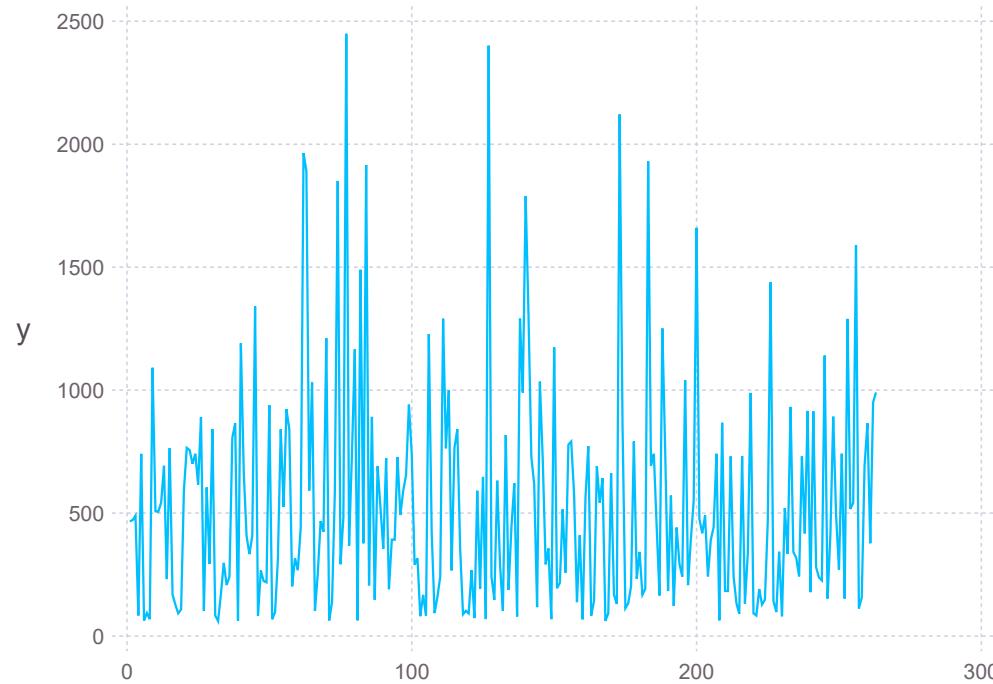
Out[102...]



In [103...]

```
# Independence Assumption  
Gadfly.plot(y=red2, Geom.line)
```

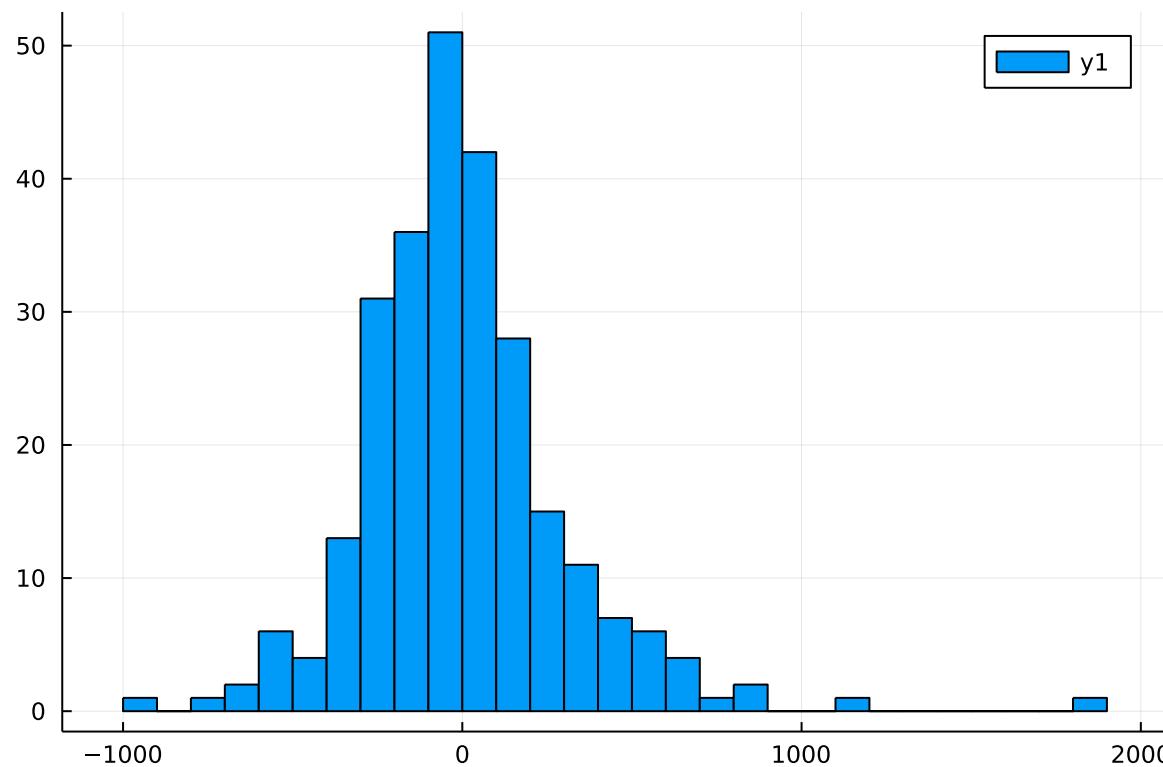
Out[103...]



In [104...]

```
histogram(residuals(model1))
```

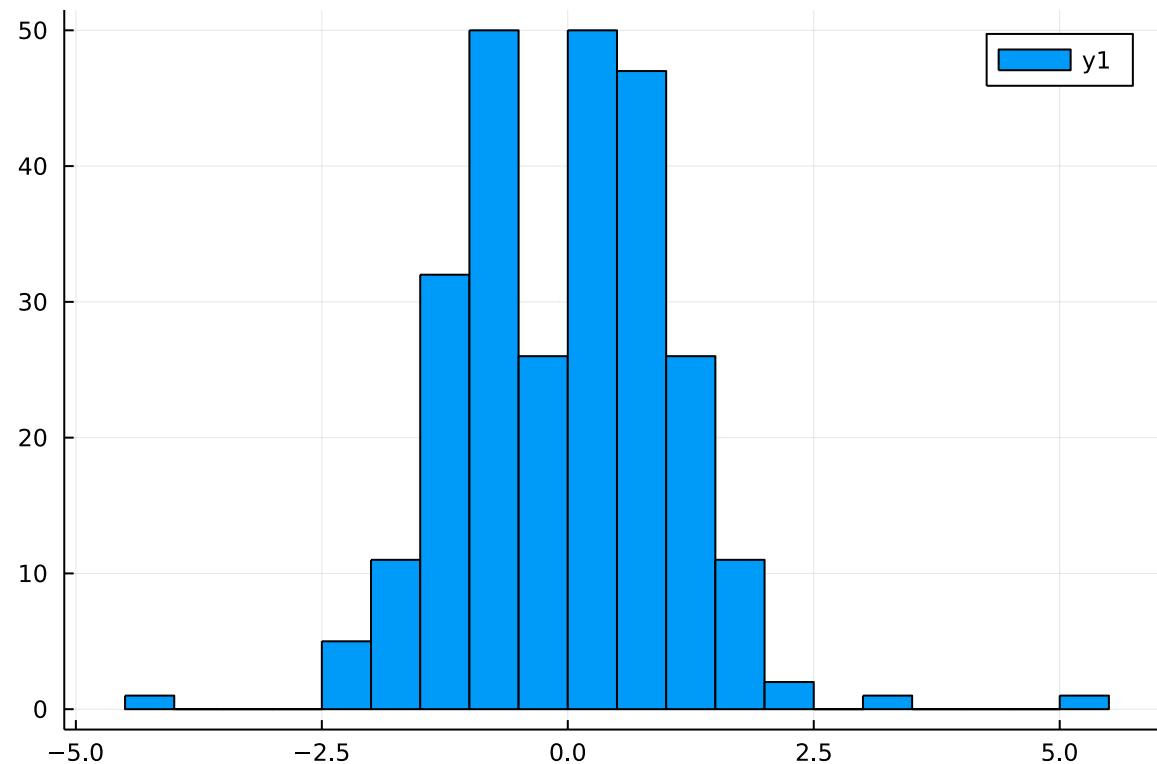
Out[104...]



In [105...]

```
histogram(residuals(model2))
```

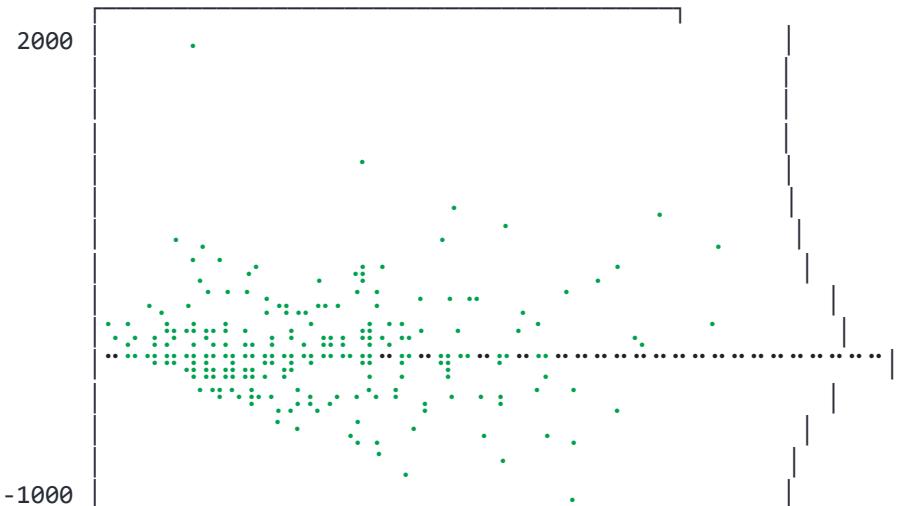
Out[105...]



In [106...]

```
using UnicodePlots
scatterplot(predict(model1),residuals(model1))
```

Out[106...]

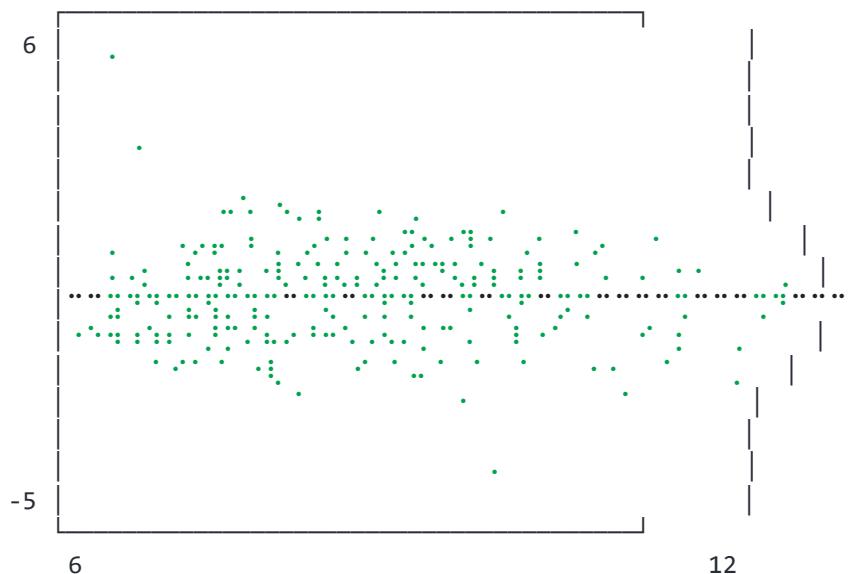




In [107...]

```
scatterplot(predict(model2),residuals(model2))
```

Out[107...]



In [108...]

```
r2(model1)
```

Out[108...]

```
0.5461158619125323
```

In [109...]

```
r2(model2)
```

Out[109...]

```
0.5613226588015994
```

Coefficient Significance

In [110...]

```
coef(model1)
```

Out[110...]

```
20-element Vector{Float64}:
 163.10358775117987
 -1.9798728999519999
 7.500767544664079
```

```
4.330882897911241
-2.376209983954669
-1.0449619609758753
6.231286323075035
-3.489054263241972
-0.17134047309998213
0.133990961432787
-0.17286107024687594
1.4543049400843155
0.807708801703598
-0.811570910626846
62.59942303518597
-116.84924563687468
0.281892513358237
0.37106921041623425
-3.360760479856258
-24.762325108398404
```

In [111...]

```
coef(model2)
```

Out[111...]

```
20-element Vector{Float64}:
5.958137033293614
-0.005705155166806257
0.02495310159281762
0.02222379248521012
-0.003849390295303326
-0.0035743512955071044
0.020920711214594087
0.0917027095680033
0.0001585508668710379
-0.0007098411167356391
-0.0002911097216414945
0.0031233959447287242
0.0005436135070061818
-0.002781474659996618
0.49190304819776487
-0.3227925416929691
0.0006722287030038898
0.001163635150283315
-0.021367403194437206
-0.2963798440198402
```

Models Diagnostics

In [112...]: `regtable(model1, model2)`

	Salary	bSalary
	(1)	(2)
(Intercept)	163.104 (90.779)	5.958*** (0.326)
AtBat	-1.980** (0.634)	-0.006* (0.002)
Hits	7.501** (2.378)	0.025** (0.009)
HmRun	4.331 (6.201)	0.022 (0.022)
Runs	-2.376 (2.981)	-0.004 (0.011)
RBI	-1.045 (2.601)	-0.004 (0.009)
Walks	6.231*** (1.829)	0.021** (0.007)
Years	-3.489 (12.412)	0.092* (0.045)
CAtBat	-0.171 (0.135)	0.000 (0.000)
CHits	0.134 (0.675)	-0.001 (0.002)
CHmRun	-0.173 (1.617)	-0.000 (0.006)
CRuns	1.454 (0.750)	0.003 (0.003)
CRBI	0.808 (0.693)	0.001 (0.002)
CWalks	-0.812* (0.328)	-0.003* (0.001)
League: N	62.599 (79.261)	0.492 (0.285)
Division: W	-116.849** (40.367)	-0.323* (0.145)
PutOuts	0.282*** (0.077)	0.001* (0.000)
Assists	0.371 (0.221)	0.001 (0.001)
Errors	-3.361 (4.392)	-0.021 (0.016)

NewLeague: N	-24.762	-0.296
	(79.003)	(0.284)
<hr/>		
Estimator	OLS	OLS
<hr/>		
N	263	263
R2	0.546	0.561
<hr/>		

After performing the Box-Cox transformation, although all of the assumption is not hold properly, the R-square value is improved. It stated that the model is slightly perform well and will be more efficient if further experimental setup is applied.

(e) Alternating Conditional Expectation (ACE)

In [113...]

```
using RCall
@rput Hitters
R"str(Hitters)"

'data.frame': 263 obs. of 21 variables:
 $ AtBat     : int  315 479 496 321 594 185 298 323 401 574 ...
 $ Hits      : int  81 130 141 87 169 37 73 81 92 159 ...
 $ HmRun     : int  7 18 20 10 4 1 0 6 17 21 ...
 $ Runs      : int  24 66 65 39 74 23 24 26 49 107 ...
 $ RBI       : int  38 72 78 42 51 8 24 32 66 75 ...
 $ Walks     : int  39 76 37 30 35 21 7 8 65 59 ...
 $ Years     : int  14 3 11 2 11 2 3 2 13 10 ...
 $ CATBat    : int  3449 1624 5628 396 4408 214 509 341 5206 4631 ...
 $ CHits     : int  835 457 1575 101 1133 42 108 86 1332 1300 ...
 $ CHmRun   : int  69 63 225 12 19 1 0 6 253 90 ...
 $ CRuns     : int  321 224 828 48 501 30 41 32 784 702 ...
 $ CRBI      : int  414 266 838 46 336 9 37 34 890 504 ...
 $ CWalks    : int  375 263 354 33 194 24 12 8 866 488 ...
 $ League    : Factor w/ 2 levels "A","N": 2 1 2 2 1 2 1 2 1 1 ...
 $ Division  : Factor w/ 2 levels "E","W": 2 2 1 1 2 1 2 2 1 1 ...
 $ PutOuts   : int  632 880 200 805 282 76 121 143 0 238 ...
 $ Assists   : int  43 82 11 40 421 127 283 290 0 445 ...
 $ Errors    : int  10 14 3 4 25 7 9 19 0 22 ...
 $ Salary    : num  475 480 500 91.5 750 ...
```

```
$ NewLeague: Factor w/ 2 levels "A","N": 2 1 2 2 1 1 1 2 1 1 ...
$ bSalary : num 8.66 8.68 8.76 5.78 9.55 ...
```

Out[113...]
RObject{NilSxp}
NULL

In [114...]
R"library(acepack)"

Out[114...]
RObject{StrSxp}
[1] "acepack" "stats" "graphics" "grDevices" "utils" "datasets"
[7] "methods" "base"

In [115...]
@rput Hitters
R"x <- Hitters[, -c(14,15,19,20)]"
R"y <- Hitters[, 19]"
R"mod <- ace(x,y)"

Out[115...]
RObject{VecSxp}
\$p
[1] 17

\$n
[1] 263

\$x

	1	2	3	4	5	6
AtBat	315.00000	479.00000	496.00000	321.00000	594.00000	185.00000
Hits	81.00000	130.00000	141.00000	87.00000	169.00000	37.00000
HmRun	7.00000	18.00000	20.00000	10.00000	4.00000	1.00000
Runs	24.00000	66.00000	65.00000	39.00000	74.00000	23.00000
RBI	38.00000	72.00000	78.00000	42.00000	51.00000	8.00000
Walks	39.00000	76.00000	37.00000	30.00000	35.00000	21.00000
Years	14.00000	3.00000	11.00000	2.00000	11.00000	2.00000
CAtBat	3449.00000	1624.00000	5628.00000	396.00000	4408.00000	214.00000
CHits	835.00000	457.00000	1575.00000	101.00000	1133.00000	42.00000
CHmRun	69.00000	63.00000	225.00000	12.00000	19.00000	1.00000
CRuns	321.00000	224.00000	828.00000	48.00000	501.00000	30.00000
CRBI	414.00000	266.00000	838.00000	46.00000	336.00000	9.00000
CWalks	375.00000	263.00000	354.00000	33.00000	194.00000	24.00000
PutOuts	632.00000	880.00000	200.00000	805.00000	282.00000	76.00000
Assists	43.00000	82.00000	11.00000	40.00000	421.00000	127.00000
Errors	10.00000	14.00000	3.00000	4.00000	25.00000	7.00000
bSalary	8.660888	8.680873	8.758991	5.775464	9.553321	5.351515
	7	8	9	10	11	12
AtBat	298.00000	323.00000	401.00000	574.00000	202.00000	418.00000

Homework4

Hits	73.000000	81.000000	92.000000	159.000000	53.000000	113.000000
HmRun	0.000000	6.000000	17.000000	21.000000	4.000000	13.000000
Runs	24.000000	26.000000	49.000000	107.000000	31.000000	48.000000
RBI	24.000000	32.000000	66.000000	75.000000	26.000000	61.000000
Walks	7.000000	8.000000	65.000000	59.000000	27.000000	47.000000
Years	3.000000	2.000000	13.000000	10.000000	9.000000	4.000000
CAtBat	509.000000	341.000000	5206.000000	4631.000000	1876.000000	1512.000000
CHits	108.000000	86.000000	1332.000000	1300.000000	467.000000	392.000000
CHmRun	0.000000	6.000000	253.000000	90.000000	15.000000	41.000000
CRuns	41.000000	32.000000	784.000000	702.000000	192.000000	205.000000
CRBI	37.000000	34.000000	890.000000	504.000000	186.000000	204.000000
CWalks	12.000000	8.000000	866.000000	488.000000	161.000000	203.000000
PutOuts	121.000000	143.000000	0.000000	238.000000	304.000000	211.000000
Assists	283.000000	290.000000	0.000000	445.000000	45.000000	11.000000
Errors	9.000000	19.000000	0.000000	22.000000	11.000000	7.000000
bSalary	5.918716	5.459584	10.33526	8.823755	8.806407	8.942687
	13	14	15	16	17	18
AtBat	239.000000	196.000000	568.000000	190.000000	127.000000	413.000000
Hits	60.000000	43.000000	158.000000	46.000000	32.000000	92.000000
HmRun	0.000000	7.000000	20.000000	2.000000	8.000000	16.000000
Runs	30.000000	29.000000	89.000000	24.000000	16.000000	72.000000
RBI	11.000000	27.000000	75.000000	8.000000	22.000000	48.000000
Walks	22.000000	30.000000	73.000000	15.000000	14.000000	65.000000
Years	6.000000	13.000000	15.000000	5.000000	8.000000	1.000000
CAtBat	1941.000000	3231.000000	8068.000000	479.000000	727.000000	413.000000
CHits	510.000000	825.000000	2273.000000	102.000000	180.000000	92.000000
CHmRun	4.000000	36.000000	177.000000	5.000000	24.000000	16.000000
CRuns	309.000000	376.000000	1045.000000	65.000000	67.000000	72.000000
CRBI	103.000000	290.000000	993.000000	23.000000	82.000000	48.000000
CWalks	207.000000	238.000000	732.000000	39.000000	56.000000	65.000000
PutOuts	121.000000	80.000000	105.000000	102.000000	202.000000	280.000000
Assists	151.000000	45.000000	290.000000	177.000000	22.000000	9.000000
Errors	6.000000	8.000000	10.000000	16.000000	2.000000	5.000000
bSalary	9.415767	7.404191	9.619046	6.852483	6.412654	5.918716
	19	20	21	22	23	24
AtBat	426.000000	472.000000	629.000000	587.000000	324.000000	474.000000
Hits	109.000000	116.000000	168.000000	163.000000	73.000000	129.000000
HmRun	3.000000	16.000000	18.000000	4.000000	4.000000	10.000000
Runs	55.000000	60.000000	73.000000	92.000000	32.000000	50.000000
RBI	43.000000	62.000000	102.000000	51.000000	18.000000	56.000000
Walks	62.000000	74.000000	40.000000	70.000000	22.000000	40.000000
Years	1.000000	6.000000	18.000000	6.000000	7.000000	10.000000
CAtBat	426.000000	1924.000000	8424.000000	2695.000000	1931.000000	2331.000000
CHits	109.000000	489.000000	2464.000000	747.000000	491.000000	604.000000
CHmRun	3.000000	67.000000	164.000000	17.000000	13.000000	61.000000

Homework4

CRuns	55.000000	242.000000	1008.00000	442.000000	291.00000	246.000000
CRBI	43.000000	251.000000	1072.00000	198.000000	108.00000	327.000000
CWalks	62.000000	240.000000	402.00000	317.000000	180.00000	166.000000
PutOuts	361.000000	518.000000	1067.00000	434.000000	222.00000	732.000000
Assists	22.000000	55.000000	157.00000	9.000000	3.00000	83.000000
Errors	2.000000	3.000000	14.00000	3.000000	3.00000	13.000000
bSalary	6.146816	9.111998	9.62336	9.592987	9.43929	9.553321
	25	26	27	28	29	30
AtBat	550.000000	513.000000	419.000000	583.000000	204.000000	379.000000
Hits	152.000000	137.000000	108.000000	168.000000	49.000000	106.000000
HmRun	6.000000	20.000000	6.000000	17.000000	6.000000	10.000000
Runs	92.000000	90.000000	55.000000	83.000000	23.000000	38.000000
RBI	37.000000	95.000000	36.000000	80.000000	25.000000	60.000000
Walks	81.000000	90.000000	22.000000	56.000000	12.000000	30.000000
Years	5.000000	14.000000	3.000000	5.000000	7.000000	14.000000
CAtBat	2308.000000	5201.000000	591.000000	1646.000000	1309.000000	6207.000000
CHits	633.000000	1382.000000	149.000000	452.000000	308.000000	1906.000000
CHmRun	32.000000	166.000000	8.000000	44.000000	27.000000	146.000000
CRuns	349.000000	763.000000	80.000000	219.000000	126.000000	859.000000
CRBI	182.000000	734.000000	46.000000	208.000000	132.000000	803.000000
CWalks	308.000000	784.000000	31.000000	136.000000	66.000000	571.000000
PutOuts	262.000000	267.000000	226.000000	109.000000	419.000000	72.000000
Assists	329.000000	5.000000	7.000000	292.000000	46.000000	170.000000
Errors	16.000000	3.000000	4.000000	25.000000	5.000000	24.000000
bSalary	9.191964	9.921648	6.073906	9.152346	7.805115	9.805418
	31	32	33	34	35	36
AtBat	268.000000	181.000000	217.000000	254.000000	416.000000	205.000000
Hits	60.000000	41.000000	46.000000	68.000000	132.000000	57.000000
HmRun	5.000000	1.000000	7.000000	2.000000	7.000000	8.000000
Runs	24.000000	15.000000	32.000000	28.000000	57.000000	34.000000
RBI	25.000000	21.000000	19.000000	26.000000	49.000000	32.000000
Walks	15.000000	33.000000	9.000000	22.000000	33.000000	9.000000
Years	2.000000	2.000000	4.000000	6.000000	3.000000	5.000000
CAtBat	350.000000	232.000000	694.000000	999.000000	932.000000	756.000000
CHits	78.000000	50.000000	160.000000	236.000000	273.000000	192.000000
CHmRun	5.000000	4.000000	32.000000	21.000000	24.000000	32.000000
CRuns	34.000000	20.000000	86.000000	108.000000	113.000000	117.000000
CRBI	29.000000	29.000000	76.000000	117.000000	121.000000	107.000000
CWalks	18.000000	45.000000	32.000000	118.000000	80.000000	51.000000
PutOuts	442.000000	326.000000	307.000000	359.000000	73.000000	58.000000
Assists	59.000000	29.000000	25.000000	30.000000	177.000000	4.000000
Errors	6.000000	5.000000	1.000000	4.000000	18.000000	4.000000
bSalary	5.748955	5.294864	6.900951	7.835188	7.209974	7.458923
	37	38	39	40	41	42
AtBat	526.000000	457.000000	214.000000	591.000000	403.000000	405.000000

Homework4

Hits	146.000000	101.000000	53.000000	168.000000	101.000000	102.000000
HmRun	13.000000	14.000000	2.000000	19.000000	12.000000	18.000000
Runs	71.000000	42.000000	30.000000	80.000000	45.000000	49.000000
RBI	70.000000	63.000000	29.000000	72.000000	53.000000	85.000000
Walks	84.000000	22.000000	23.000000	39.000000	39.000000	20.000000
Years	6.000000	17.000000	2.000000	9.000000	12.000000	6.000000
CAtBat	2648.000000	6521.000000	226.000000	4478.000000	5150.000000	950.000000
CHits	715.000000	1767.000000	59.000000	1307.000000	1429.000000	231.000000
CHmRun	77.000000	281.000000	2.000000	113.000000	166.000000	29.000000
CRuns	352.000000	1003.000000	32.000000	634.000000	747.000000	99.000000
CRBI	342.000000	977.000000	32.000000	563.000000	666.000000	138.000000
CWalks	289.000000	619.000000	27.000000	319.000000	526.000000	64.000000
PutOuts	303.000000	389.000000	109.000000	67.000000	316.000000	161.000000
Assists	9.000000	39.000000	7.000000	147.000000	6.000000	10.000000
Errors	9.000000	4.000000	3.000000	4.000000	5.000000	3.000000
bSalary	9.720358	9.864276	5.351515	10.51733	9.343658	8.405125
	43	44	45	46	47	48
AtBat	244.000000	313.000000	627.000000	416.000000	155.000000	236.000000
Hits	58.000000	78.000000	177.000000	113.000000	44.000000	56.000000
HmRun	9.000000	6.000000	25.000000	24.000000	6.000000	0.000000
Runs	28.000000	32.000000	98.000000	58.000000	21.000000	27.000000
RBI	25.000000	41.000000	81.000000	69.000000	23.000000	15.000000
Walks	35.000000	12.000000	70.000000	16.000000	15.000000	11.000000
Years	4.000000	12.000000	6.000000	1.000000	16.000000	4.000000
CAtBat	1335.000000	3742.000000	3210.000000	416.000000	6631.000000	1115.000000
CHits	333.000000	968.000000	927.000000	113.000000	1634.000000	270.000000
CHmRun	49.000000	35.000000	133.000000	24.000000	98.000000	1.000000
CRuns	164.000000	409.000000	529.000000	58.000000	698.000000	116.000000
CRBI	179.000000	321.000000	472.000000	69.000000	661.000000	64.000000
CWalks	194.000000	170.000000	313.000000	16.000000	777.000000	57.000000
PutOuts	142.000000	106.000000	240.000000	203.000000	53.000000	125.000000
Assists	14.000000	206.000000	482.000000	70.000000	88.000000	199.000000
Errors	2.000000	7.000000	13.000000	10.000000	3.000000	13.000000
bSalary	8.034135	8.412666	10.76644	5.748955	7.647665	7.328782
	49	50	51	52	53	54
AtBat	216.000000	585.000000	199.000000	521.000000	311.000000	512.000000
Hits	53.000000	139.000000	53.000000	142.000000	81.000000	131.000000
HmRun	1.000000	31.000000	5.000000	20.000000	3.000000	26.000000
Runs	31.000000	93.000000	29.000000	67.000000	42.000000	69.000000
RBI	15.000000	94.000000	22.000000	86.000000	30.000000	96.000000
Walks	22.000000	62.000000	21.000000	45.000000	26.000000	52.000000
Years	4.000000	17.000000	3.000000	4.000000	17.000000	14.000000
CAtBat	926.000000	7546.000000	514.000000	815.000000	8247.000000	5347.000000
CHits	210.000000	1982.000000	120.000000	205.000000	2198.000000	1397.000000
CHmRun	9.000000	315.000000	8.000000	22.000000	100.000000	221.000000

CRuns	118.000000	1141.00000	57.000000	99.000000	950.000000	712.000000
CRBI	69.000000	1179.00000	40.000000	103.000000	909.000000	815.000000
CWalks	114.000000	727.00000	39.000000	78.000000	690.000000	548.000000
PutOuts	73.000000	0.000000	152.000000	107.000000	153.000000	119.000000
Assists	152.000000	0.000000	3.000000	242.000000	223.000000	216.000000
Errors	11.000000	0.000000	5.000000	23.000000	10.000000	12.000000
bSalary	7.289971	10.03223	5.459584	5.997965	7.922831	9.805418
	55	56	57	58	59	60
AtBat	507.000000	529.000000	424.000000	351.000000	388.000000	339.000000
Hits	122.000000	137.000000	119.000000	97.000000	103.000000	96.000000
HmRun	29.000000	26.000000	6.000000	4.000000	15.000000	4.000000
Runs	78.000000	86.000000	57.000000	55.000000	59.000000	37.000000
RBI	85.000000	97.000000	46.000000	29.000000	47.000000	29.000000
Walks	91.000000	97.000000	13.000000	39.000000	39.000000	23.000000
Years	18.000000	15.000000	9.000000	4.000000	6.000000	4.000000
CAtBat	7761.000000	6661.000000	3651.000000	1258.000000	2174.000000	1064.000000
CHits	1947.000000	1785.000000	1046.000000	353.000000	555.000000	290.000000
CHmRun	347.000000	291.000000	32.000000	16.000000	80.000000	11.000000
CRuns	1175.000000	1082.000000	461.000000	196.000000	285.000000	123.000000
CRBI	1152.000000	949.000000	301.000000	110.000000	274.000000	108.000000
CWalks	1380.000000	989.000000	112.000000	117.000000	186.000000	55.000000
PutOuts	808.000000	280.000000	224.000000	226.000000	182.000000	104.000000
Assists	108.000000	10.000000	286.000000	7.000000	9.000000	213.000000
Errors	2.000000	5.000000	8.000000	3.000000	4.000000	9.000000
bSalary	8.889204	9.995963	9.805418	7.168719	7.951228	7.647665
	61	62	63	64	65	66
AtBat	255.000000	677.00000	614.00000	329.000000	637.00000	280.000000
Hits	70.000000	238.00000	163.00000	83.000000	174.00000	82.000000
HmRun	7.000000	31.00000	29.00000	9.000000	31.00000	16.000000
Runs	49.000000	117.00000	89.00000	50.000000	89.00000	44.000000
RBI	35.000000	113.00000	83.00000	39.000000	116.00000	45.000000
Walks	43.000000	53.00000	75.00000	56.000000	56.00000	47.000000
Years	15.000000	5.00000	11.00000	9.000000	14.00000	2.000000
CAtBat	6311.000000	2223.000000	5017.000000	3828.000000	6727.000000	428.000000
CHits	1661.000000	737.000000	1388.000000	948.000000	2024.000000	113.000000
CHmRun	154.000000	93.000000	266.000000	145.000000	247.000000	25.000000
CRuns	1019.000000	349.000000	813.000000	575.000000	978.000000	61.000000
CRBI	608.000000	401.000000	822.000000	528.000000	1093.000000	70.000000
CWalks	820.000000	171.000000	617.000000	635.000000	495.000000	63.000000
PutOuts	51.000000	1377.000000	303.000000	276.000000	278.000000	148.000000
Assists	54.000000	100.000000	6.000000	6.000000	9.000000	4.000000
Errors	8.000000	6.000000	6.000000	2.000000	9.000000	2.000000
bSalary	8.558048	11.59245	11.50688	9.111998	10.22209	6.073906
	67	68	69	70	71	72
AtBat	155.000000	458.000000	314.0000	475.0000	317.000000	511.000000

Homework4

Hits	41.000000	114.000000	83.0000	123.0000	78.000000	138.000000
HmRun	12.000000	13.000000	13.0000	27.0000	7.000000	25.000000
Runs	21.000000	67.000000	39.0000	76.0000	35.000000	76.000000
RBI	29.000000	57.000000	46.0000	93.0000	35.000000	96.000000
Walks	22.000000	48.000000	16.0000	72.0000	32.000000	61.000000
Years	16.000000	4.000000	5.0000	4.0000	1.000000	3.000000
CAtBat	5409.000000	1350.000000	1457.0000	1810.0000	317.000000	592.000000
CHits	1338.000000	298.000000	405.0000	471.0000	78.000000	164.000000
CHmRun	181.000000	28.000000	28.0000	108.0000	7.000000	28.000000
CRuns	746.000000	160.000000	156.0000	292.0000	35.000000	87.000000
CRBI	805.000000	123.000000	159.0000	343.0000	35.000000	110.000000
CWalks	875.000000	122.000000	76.0000	267.0000	32.000000	71.000000
PutOuts	165.000000	246.000000	533.0000	226.0000	45.000000	157.000000
Assists	9.000000	389.000000	40.0000	10.0000	122.000000	7.000000
Errors	1.000000	18.000000	4.0000	6.0000	26.000000	8.000000
bSalary	7.546928	8.660888	8.4786	10.5521	5.351515	6.532574
	73	74	75	76	77	78
AtBat	382.000000	565.000000	415.000000	424.000000	495.0000	233.000000
Hits	119.000000	148.000000	115.000000	110.000000	151.0000	49.000000
HmRun	13.000000	24.000000	27.000000	15.000000	17.0000	2.000000
Runs	54.000000	90.000000	97.000000	70.000000	61.0000	41.000000
RBI	58.000000	104.000000	71.000000	47.000000	84.0000	23.000000
Walks	36.000000	77.000000	68.000000	36.000000	78.0000	18.000000
Years	12.000000	14.000000	3.000000	7.000000	10.0000	8.000000
CAtBat	2133.000000	7287.000000	711.000000	2130.000000	5624.0000	1350.000000
CHits	594.000000	2083.000000	184.000000	544.000000	1679.0000	336.000000
CHmRun	41.000000	305.000000	45.000000	38.000000	275.0000	7.000000
CRuns	287.000000	1135.000000	156.000000	335.000000	884.0000	166.000000
CRBI	294.000000	1234.000000	119.000000	174.000000	1015.0000	122.000000
CWalks	227.000000	791.000000	99.000000	258.000000	709.0000	106.000000
PutOuts	59.000000	292.000000	274.000000	292.000000	1045.0000	102.000000
Assists	156.000000	9.000000	2.000000	6.000000	88.0000	132.000000
Errors	9.000000	5.000000	7.000000	3.000000	13.0000	10.000000
bSalary	9.095647	11.46173	7.805115	8.720289	12.0844	8.215524
	79	80	81	82	83	84
AtBat	566.000000	641.000000	215.000000	441.000000	325.000000	490.000000
Hits	154.000000	198.000000	51.000000	128.000000	76.000000	125.000000
HmRun	22.000000	31.000000	4.000000	16.000000	16.000000	24.000000
Runs	76.000000	101.000000	19.000000	70.000000	33.000000	81.000000
RBI	84.000000	108.000000	18.000000	73.000000	52.000000	105.000000
Walks	43.000000	41.000000	11.000000	80.000000	37.000000	62.000000
Years	14.000000	5.000000	1.000000	14.000000	5.000000	13.000000
CAtBat	6100.000000	2129.000000	215.000000	6675.000000	1506.000000	6063.000000
CHits	1583.000000	610.000000	51.000000	2095.000000	351.000000	1646.000000
CHmRun	131.000000	92.000000	4.000000	209.000000	71.000000	271.000000

Homework4

CRuns	743.000000	297.000000	19.000000	1072.000000	195.000000	847.000000
CRBI	693.000000	319.000000	18.000000	1050.000000	219.000000	999.000000
CWalks	300.000000	117.000000	11.000000	695.000000	214.000000	680.000000
PutOuts	316.000000	269.000000	116.000000	97.000000	726.000000	869.000000
Assists	439.000000	17.000000	5.000000	218.000000	87.000000	62.000000
Errors	10.000000	10.000000	12.000000	16.000000	3.000000	8.000000
bSalary	9.553321	10.47312	5.351515	10.99189	8.264562	11.53639
	85	86	87	88	89	90
AtBat	574.000000	596.000000	472.000000	283.000000	408.000000	327.000000
Hits	152.000000	171.000000	118.000000	77.000000	94.000000	85.000000
HmRun	31.000000	34.000000	12.000000	14.000000	4.000000	3.000000
Runs	91.000000	91.000000	63.000000	45.000000	42.000000	30.000000
RBI	101.000000	108.000000	54.000000	47.000000	36.000000	44.000000
Walks	64.000000	52.000000	30.000000	26.000000	66.000000	20.000000
Years	3.000000	6.000000	4.000000	16.000000	9.000000	8.000000
CAtBat	985.000000	2862.000000	793.000000	6840.000000	3573.000000	2140.000000
CHits	260.000000	728.000000	187.000000	1910.000000	866.000000	568.000000
CHmRun	53.000000	107.000000	14.000000	259.000000	59.000000	16.000000
CRuns	148.000000	361.000000	102.000000	915.000000	429.000000	216.000000
CRBI	173.000000	401.000000	80.000000	1067.000000	365.000000	208.000000
CWalks	95.000000	224.000000	50.000000	546.000000	410.000000	93.000000
PutOuts	1253.000000	118.000000	228.000000	144.000000	282.000000	91.000000
Assists	111.000000	334.000000	377.000000	6.000000	487.000000	185.000000
Errors	11.000000	21.000000	26.000000	5.000000	19.000000	12.000000
bSalary	7.209974	9.921648	6.645307	9.415767	8.889204	8.152552
	91	92	93	94	95	96
AtBat	370.000000	354.000000	539.000000	340.000000	510.000000	282.000000
Hits	96.000000	77.000000	139.000000	84.000000	126.000000	78.000000
HmRun	21.000000	16.000000	5.000000	11.000000	2.000000	13.000000
Runs	49.000000	36.000000	93.000000	62.000000	42.000000	37.000000
RBI	46.000000	55.000000	58.000000	33.000000	44.000000	51.000000
Walks	60.000000	41.000000	69.000000	47.000000	35.000000	29.000000
Years	15.000000	20.000000	5.000000	5.000000	11.000000	5.000000
CAtBat	6986.000000	8716.000000	1469.000000	1516.000000	5562.000000	1649.000000
CHits	1972.000000	2172.000000	369.000000	376.000000	1578.000000	453.000000
CHmRun	231.000000	384.000000	12.000000	42.000000	44.000000	73.000000
CRuns	1070.000000	1172.000000	247.000000	284.000000	703.000000	211.000000
CRBI	955.000000	1267.000000	126.000000	141.000000	519.000000	280.000000
CWalks	921.000000	1057.000000	198.000000	219.000000	256.000000	138.000000
PutOuts	137.000000	83.000000	462.000000	185.000000	207.000000	670.000000
Assists	5.000000	174.000000	9.000000	8.000000	358.000000	57.000000
Errors	9.000000	16.000000	7.000000	4.000000	20.000000	5.000000
bSalary	9.508406	7.083499	8.336024	8.336024	9.519721	8.758991
	97	98	99	100	101	102
AtBat	380.000000	584.000000	570.000000	306.000000	220.000000	278.000000

Hits	120.000000	158.000000	169.00000	104.000000	54.00000	70.000000
HmRun	5.000000	15.000000	21.00000	14.000000	10.00000	7.000000
Runs	54.000000	70.000000	72.00000	50.000000	30.00000	22.000000
RBI	51.000000	84.000000	88.00000	58.000000	39.00000	37.000000
Walks	31.000000	42.000000	38.00000	25.000000	31.00000	18.000000
Years	8.000000	5.000000	7.00000	7.000000	5.00000	18.000000
CAtBat	3118.000000	2358.000000	3754.00000	2954.000000	1185.00000	7186.000000
CHits	900.000000	636.000000	1077.00000	822.000000	299.00000	2081.000000
CHmRun	92.000000	58.000000	140.00000	55.000000	40.00000	190.000000
CRuns	444.000000	265.000000	492.00000	313.000000	145.00000	935.000000
CRBI	419.000000	316.000000	589.00000	377.000000	154.00000	1088.000000
CWalks	240.000000	134.000000	263.00000	187.000000	128.00000	643.000000
PutOuts	237.000000	331.000000	295.00000	116.000000	50.00000	0.000000
Assists	8.000000	20.000000	15.00000	222.000000	136.00000	0.000000
Errors	1.000000	4.000000	5.00000	15.000000	20.00000	0.000000
bSalary	9.111998	9.306702	10.03223	9.553321	7.78991	7.951228
	103	104	105	106	107	108
AtBat	445.000000	143.000000	185.000000	589.00000	343.000000	438.000000
Hits	99.000000	39.000000	40.00000	170.00000	103.00000	103.000000
HmRun	1.000000	5.000000	4.000000	40.00000	6.000000	2.000000
Runs	46.000000	18.000000	23.000000	107.00000	48.000000	65.000000
RBI	24.000000	30.000000	11.000000	108.00000	36.000000	32.000000
Walks	29.000000	15.000000	18.000000	69.00000	40.000000	71.000000
Years	4.000000	9.000000	3.000000	6.00000	15.000000	2.000000
CAtBat	618.000000	639.000000	524.000000	2325.00000	4338.000000	440.000000
CHits	129.000000	151.000000	125.000000	634.00000	1193.000000	103.000000
CHmRun	1.000000	16.000000	7.000000	128.00000	70.000000	2.000000
CRuns	72.000000	80.000000	58.000000	371.00000	581.000000	67.000000
CRBI	31.000000	97.000000	37.000000	376.00000	421.000000	32.000000
CWalks	48.000000	61.000000	47.000000	238.00000	325.000000	71.000000
PutOuts	278.000000	138.000000	97.000000	368.00000	211.000000	276.000000
Assists	415.000000	15.000000	2.000000	20.00000	56.000000	7.000000
Errors	16.000000	1.000000	2.000000	3.00000	13.000000	9.000000
bSalary	5.703882	6.852483	5.748955	10.58211	8.472026	5.918716
	109	110	111	112	113	114
AtBat	600.000000	663.000000	232.00000	479.000000	528.00000	160.000000
Hits	144.000000	200.000000	55.00000	133.000000	132.00000	39.000000
HmRun	33.000000	29.000000	9.00000	10.000000	21.00000	8.000000
Runs	85.000000	108.000000	34.00000	48.000000	61.00000	18.000000
RBI	117.000000	121.000000	23.00000	72.000000	74.00000	31.000000
Walks	65.000000	32.000000	45.00000	55.000000	41.00000	22.000000
Years	2.000000	4.000000	12.00000	17.000000	6.00000	14.000000
CAtBat	696.000000	1447.000000	4405.00000	7472.000000	2641.00000	2128.000000
CHits	173.000000	404.000000	1213.00000	2147.000000	671.00000	543.000000
CHmRun	38.000000	57.000000	194.00000	153.000000	97.00000	56.000000

CRuns	101.000000	210.000000	702.00000	980.000000	273.00000	304.000000
CRBI	130.000000	222.000000	705.00000	1032.000000	383.00000	268.000000
CWalks	69.000000	68.000000	625.00000	854.000000	226.00000	298.000000
PutOuts	319.000000	241.000000	623.00000	237.000000	885.00000	33.000000
Assists	4.000000	8.000000	35.00000	5.000000	105.00000	3.000000
Errors	14.000000	6.000000	3.00000	4.000000	8.00000	0.000000
bSalary	6.751707	7.476837	10.68628	9.614723	10.15485	7.647665
	115	116	117	118	119	120
AtBat	599.000000	497.000000	210.0000	151.000000	278.000000	341.000000
Hits	183.000000	136.000000	70.0000	41.000000	86.000000	95.000000
HmRun	10.000000	7.000000	13.0000	4.000000	4.000000	6.000000
Runs	80.000000	58.000000	32.0000	26.000000	33.000000	48.000000
RBI	74.000000	38.000000	51.0000	21.000000	38.000000	42.000000
Walks	32.000000	26.000000	28.0000	19.000000	45.000000	20.000000
Years	5.000000	11.000000	15.0000	2.000000	1.000000	10.000000
CAtBat	2482.000000	3871.000000	4040.0000	288.000000	278.000000	2964.000000
CHits	715.000000	1066.000000	1130.0000	68.000000	86.000000	808.000000
CHmRun	27.000000	40.000000	97.0000	9.000000	4.000000	81.000000
CRuns	330.000000	450.000000	544.0000	45.000000	33.000000	379.000000
CRBI	326.000000	367.000000	462.0000	39.000000	38.000000	428.000000
CWalks	158.000000	241.000000	551.0000	35.000000	45.000000	221.000000
PutOuts	231.000000	304.000000	0.0000	28.000000	102.000000	158.000000
Assists	374.000000	347.000000	0.0000	56.000000	4.000000	4.000000
Errors	18.000000	10.000000	0.0000	2.000000	2.000000	5.000000
bSalary	9.619046	9.805418	8.1653	5.835836	6.073906	5.918716
	121	122	123	124	125	126
AtBat	537.000000	399.000000	309.000000	616.000000	579.000000	165.000000
Hits	147.000000	102.000000	94.000000	163.000000	174.000000	39.000000
HmRun	23.000000	3.000000	5.000000	27.000000	7.000000	2.000000
Runs	58.000000	56.000000	37.000000	83.000000	67.000000	13.000000
RBI	88.000000	34.000000	32.000000	107.000000	78.000000	9.000000
Walks	47.000000	34.000000	26.000000	32.000000	58.000000	16.000000
Years	10.000000	5.000000	13.000000	3.000000	6.000000	3.000000
CAtBat	2744.000000	670.000000	4618.000000	1437.000000	3053.000000	196.000000
CHits	730.000000	167.000000	1330.000000	377.000000	880.000000	44.000000
CHmRun	97.000000	4.000000	57.000000	65.000000	32.000000	2.000000
CRuns	302.000000	89.000000	616.000000	181.000000	366.000000	18.000000
CRBI	351.000000	48.000000	522.000000	227.000000	337.000000	10.000000
CWalks	174.000000	54.000000	436.000000	82.000000	218.000000	18.000000
PutOuts	92.000000	211.000000	161.000000	110.000000	280.000000	332.000000
Assists	257.000000	9.000000	3.000000	308.000000	479.000000	19.000000
Errors	20.000000	3.000000	3.000000	15.000000	5.000000	2.000000
bSalary	7.663974	5.561385	9.111998	7.083499	9.290244	5.459584
	127	128	129	130	131	132
AtBat	618.0000	257.000000	315.000000	591.00000	404.000000	315.000000

Homework4

Hits	200.00000	66.000000	76.000000	157.00000	92.000000	73.000000
HmRun	20.00000	5.000000	13.000000	16.00000	11.000000	5.000000
Runs	98.00000	31.000000	35.000000	90.00000	54.000000	23.000000
RBI	110.00000	26.000000	60.000000	78.00000	49.000000	37.000000
Walks	62.00000	32.000000	25.000000	26.00000	18.000000	16.000000
Years	13.00000	14.000000	3.000000	4.00000	6.000000	4.000000
CAtBat	7127.00000	3910.000000	630.000000	2020.00000	1354.000000	450.000000
CHits	2163.00000	979.000000	151.000000	541.00000	325.000000	108.000000
CHmRun	351.00000	33.000000	24.000000	52.00000	30.000000	6.000000
CRuns	1104.00000	518.000000	68.000000	310.00000	188.000000	38.000000
CRBI	1289.00000	324.000000	94.000000	226.00000	135.000000	46.000000
CWalks	564.00000	382.000000	55.000000	91.00000	63.000000	28.000000
PutOuts	330.00000	87.000000	498.000000	290.00000	222.000000	227.000000
Assists	16.00000	166.000000	39.000000	440.00000	5.000000	15.000000
Errors	8.00000	14.000000	13.000000	25.00000	5.000000	3.000000
bSalary	12.04026	7.476837	6.645307	9.23858	7.805115	6.073906
	133	134	135	136	137	138
AtBat	429.00000	453.000000	184.000000	591.000000	181.000000	441.00000
Hits	91.00000	101.000000	47.000000	184.000000	58.000000	118.00000
HmRun	12.00000	3.000000	5.000000	20.000000	6.000000	28.00000
Runs	41.00000	46.000000	20.000000	83.000000	34.000000	84.00000
RBI	42.00000	43.000000	28.000000	79.000000	23.000000	86.00000
Walks	57.00000	61.000000	18.000000	38.000000	22.000000	68.00000
Years	13.00000	3.000000	11.000000	5.000000	1.000000	8.00000
CAtBat	5590.00000	948.000000	3327.000000	1689.000000	181.000000	2723.00000
CHits	1397.00000	218.000000	890.000000	462.000000	58.000000	750.00000
CHmRun	83.00000	6.000000	74.000000	40.000000	6.000000	126.00000
CRuns	578.00000	96.000000	419.000000	219.000000	34.000000	433.00000
CRBI	579.00000	72.000000	382.000000	195.000000	23.000000	420.00000
CWalks	644.00000	91.000000	304.000000	82.000000	22.000000	309.00000
PutOuts	686.00000	249.000000	49.000000	303.000000	88.000000	190.00000
Assists	46.00000	444.000000	2.000000	12.000000	0.000000	2.00000
Errors	4.000000	16.000000	0.000000	5.000000	3.000000	2.00000
bSalary	9.744989	7.039449	8.558048	9.207613	5.685529	10.68628
	139	140	141	142	143	144
AtBat	490.00000	551.00000	550.00000	283.000000	560.000000	328.0000
Hits	150.00000	171.00000	147.00000	74.000000	161.000000	91.0000
HmRun	21.00000	13.00000	29.00000	4.000000	26.000000	12.0000
Runs	69.00000	94.00000	85.00000	34.000000	89.000000	51.0000
RBI	58.00000	83.00000	91.00000	29.000000	96.000000	43.0000
Walks	35.00000	94.00000	71.00000	22.000000	66.000000	33.0000
Years	14.00000	13.00000	6.00000	10.000000	4.000000	2.0000
CAtBat	6126.00000	6090.00000	2816.00000	3919.000000	1789.000000	342.0000
CHits	1839.00000	1840.00000	815.00000	1062.000000	470.000000	94.0000
CHmRun	121.00000	128.00000	117.00000	85.000000	65.000000	12.0000

CRuns	983.00000	969.00000	405.00000	505.00000	233.00000	51.0000
CRBI	707.00000	900.00000	474.00000	456.00000	260.00000	44.0000
CWalks	600.00000	917.00000	319.00000	283.00000	155.00000	33.0000
PutOuts	96.00000	1199.00000	1218.00000	145.00000	332.00000	145.0000
Assists	5.00000	149.00000	104.00000	5.00000	9.00000	59.0000
Errors	3.00000	5.00000	10.00000	7.00000	8.00000	8.0000
bSalary	10.13773	11.38796	10.70253	9.519721	9.191964	6.2845
	145	146	147	148	149	150
AtBat	586.0000	503.00000	344.00000	680.0000	279.00000	484.0000
Hits	159.0000	136.00000	85.00000	223.0000	64.00000	127.0000
HmRun	12.0000	5.00000	24.00000	31.0000	0.00000	20.00000
Runs	72.0000	62.00000	69.00000	119.0000	31.00000	66.00000
RBI	79.0000	48.00000	64.00000	96.0000	26.00000	65.00000
Walks	53.0000	83.00000	88.00000	34.0000	30.00000	67.00000
Years	9.0000	10.00000	7.00000	3.0000	1.00000	7.00000
CAtBat	3082.0000	3423.00000	911.00000	1928.0000	279.00000	3006.0000
CHits	880.0000	970.00000	214.00000	587.0000	64.00000	844.00000
CHmRun	83.0000	20.00000	64.00000	35.0000	0.00000	116.00000
CRuns	363.0000	408.00000	150.00000	262.0000	31.00000	436.00000
CRBI	477.0000	303.00000	156.00000	201.0000	26.00000	458.00000
CWalks	295.0000	414.00000	187.00000	91.0000	30.00000	377.00000
PutOuts	181.0000	65.00000	0.00000	429.0000	107.00000	1231.00000
Assists	13.0000	258.00000	0.00000	8.0000	205.00000	80.00000
Errors	4.0000	8.00000	0.00000	6.0000	16.00000	7.00000
bSalary	10.2254	9.485606	7.805115	8.1653	5.459584	10.48795
	151	152	153	154	155	156
AtBat	431.000000	283.000000	491.000000	199.000000	589.000000	327.000000
Hits	127.000000	70.000000	141.000000	52.000000	149.000000	84.000000
HmRun	8.000000	8.000000	11.000000	9.000000	21.000000	22.000000
Runs	77.000000	33.000000	77.000000	26.000000	89.000000	53.000000
RBI	45.000000	37.000000	47.000000	28.000000	86.000000	62.000000
Walks	58.000000	27.000000	37.000000	21.000000	64.000000	38.000000
Years	2.000000	12.000000	15.000000	6.000000	7.000000	10.000000
CAtBat	667.000000	4479.000000	4291.000000	805.000000	3558.000000	4273.000000
CHits	187.000000	1222.000000	1240.000000	191.000000	928.000000	1123.000000
CHmRun	9.000000	94.000000	84.000000	30.000000	102.000000	212.000000
CRuns	117.000000	557.000000	615.000000	113.000000	513.000000	577.000000
CRBI	64.000000	483.000000	430.000000	119.000000	471.000000	700.000000
CWalks	88.000000	307.000000	340.000000	87.000000	351.000000	334.000000
PutOuts	283.000000	156.000000	239.000000	235.000000	371.000000	483.000000
Assists	8.000000	2.000000	8.000000	22.000000	6.000000	48.000000
Errors	3.000000	2.000000	2.000000	5.000000	6.000000	6.000000
bSalary	7.105156	7.289971	8.852798	7.581072	9.651199	9.682899
	157	158	159	160	161	162
AtBat	464.000000	338.000000	584.000000	216.000000	625.000000	489.000000

Homework4

Hits	128.000000	92.000000	157.000000	54.000000	179.000000	131.000000
HmRun	28.000000	18.000000	20.000000	2.000000	4.000000	19.000000
Runs	67.000000	42.000000	95.000000	27.000000	94.000000	77.000000
RBI	94.000000	60.000000	73.000000	25.000000	60.000000	55.000000
Walks	52.000000	21.000000	63.000000	33.000000	65.000000	34.000000
Years	13.000000	3.000000	10.000000	1.000000	5.000000	7.000000
CAtBat	5829.000000	682.000000	4704.000000	216.000000	1696.000000	2051.000000
CHits	1552.000000	185.000000	1320.000000	54.000000	476.000000	549.000000
CHmRun	210.000000	36.000000	93.000000	2.000000	12.000000	62.000000
CRuns	740.000000	88.000000	724.000000	27.000000	216.000000	300.000000
CRBI	840.000000	112.000000	522.000000	25.000000	163.000000	263.000000
CWalks	452.000000	50.000000	576.000000	33.000000	166.000000	153.000000
PutOuts	0.000000	0.000000	276.000000	317.000000	303.000000	310.000000
Assists	0.000000	0.000000	421.000000	36.000000	450.000000	9.000000
Errors	0.000000	0.000000	11.000000	1.000000	14.000000	9.000000
bSalary	9.070889	6.532574	8.427662	5.459584	9.02899	9.631962
	163	164	165	166	167	168
AtBat	209.000000	407.000000	490.000000	442.000000	288.000000	209.000000
Hits	56.000000	93.000000	148.000000	131.000000	65.000000	54.000000
HmRun	12.000000	8.000000	14.000000	18.000000	8.000000	3.000000
Runs	22.000000	47.000000	64.000000	68.000000	30.000000	25.000000
RBI	36.000000	30.000000	78.000000	77.000000	36.000000	14.000000
Walks	19.000000	30.000000	49.000000	33.000000	27.000000	12.000000
Years	2.000000	2.000000	13.000000	6.000000	9.000000	1.000000
CAtBat	216.000000	969.000000	3400.000000	1416.000000	2815.000000	209.000000
CHits	58.000000	230.000000	1000.000000	398.000000	698.000000	54.000000
CHmRun	12.000000	14.000000	113.000000	47.000000	55.000000	3.000000
CRuns	24.000000	121.000000	445.000000	210.000000	315.000000	25.000000
CRBI	37.000000	69.000000	491.000000	203.000000	325.000000	14.000000
CWalks	19.000000	68.000000	301.000000	136.000000	189.000000	12.000000
PutOuts	201.000000	172.000000	0.000000	233.000000	259.000000	102.000000
Assists	6.000000	317.000000	0.000000	7.000000	30.000000	6.000000
Errors	3.000000	25.000000	0.000000	7.000000	10.000000	3.000000
bSalary	5.748955	6.589782	9.415767	8.942687	9.269117	5.306343
	169	170	171	172	173	174
AtBat	303.000000	330.000000	504.000000	258.000000	20.000000	374.000000
Hits	71.000000	77.000000	120.000000	60.000000	1.000000	94.000000
HmRun	3.000000	19.000000	28.000000	8.000000	0.000000	5.000000
Runs	18.000000	47.000000	71.000000	28.000000	0.000000	36.000000
RBI	30.000000	53.000000	71.000000	33.000000	0.000000	26.000000
Walks	36.000000	27.000000	54.000000	18.000000	0.000000	62.000000
Years	3.000000	6.000000	3.000000	3.000000	2.000000	7.000000
CAtBat	344.000000	1928.000000	1085.000000	638.000000	41.000000	1968.000000
CHits	76.000000	516.000000	259.000000	170.000000	9.000000	519.000000
CHmRun	3.000000	90.000000	54.000000	17.000000	2.000000	26.000000

Homework4

CRuns	20.000000	247.000000	150.000000	80.000000	6.000000	181.000000
CRBI	36.000000	288.000000	167.000000	75.000000	7.000000	199.000000
CWalks	45.000000	161.000000	114.000000	36.000000	4.000000	288.000000
PutOuts	468.000000	149.000000	103.000000	358.000000	78.000000	756.000000
Assists	47.000000	8.000000	283.000000	32.000000	220.000000	64.000000
Errors	6.000000	6.000000	19.000000	8.000000	6.000000	15.000000
bSalary	5.918716	9.32895	6.852483	6.43726	11.75764	9.864276
	175	176	177	178	179	180
AtBat	211.000000	299.000000	576.000000	381.000000	288.000000	369.000000
Hits	43.000000	75.000000	167.000000	110.000000	76.000000	93.000000
HmRun	10.000000	6.000000	8.000000	9.000000	7.000000	9.000000
Runs	26.000000	38.000000	89.000000	61.000000	34.000000	43.000000
RBI	35.000000	23.000000	49.000000	45.000000	37.000000	42.000000
Walks	39.000000	26.000000	57.000000	32.000000	15.000000	49.000000
Years	3.000000	3.000000	4.000000	7.000000	4.000000	5.000000
CAtBat	498.000000	580.000000	822.000000	3015.000000	1644.000000	1258.000000
CHits	116.000000	160.000000	232.000000	834.000000	408.000000	323.000000
CHmRun	14.000000	8.000000	19.000000	40.000000	16.000000	54.000000
CRuns	59.000000	71.000000	132.000000	451.000000	198.000000	181.000000
CRBI	55.000000	33.000000	83.000000	249.000000	120.000000	177.000000
CWalks	78.000000	44.000000	79.000000	168.000000	113.000000	157.000000
PutOuts	463.000000	212.000000	325.000000	228.000000	203.000000	149.000000
Assists	32.000000	1.000000	12.000000	7.000000	3.000000	1.000000
Errors	8.000000	2.000000	8.000000	5.000000	3.000000	6.000000
bSalary	6.216943	6.473573	7.168719	9.682899	7.404191	8.087605
	181	182	183	184	185	186
AtBat	547.000000	572.000000	514.000000	359.000000	526.000000	313.000000
Hits	137.000000	152.000000	144.000000	80.000000	163.000000	83.000000
HmRun	2.000000	18.000000	0.000000	15.000000	12.000000	9.000000
Runs	58.000000	105.000000	67.000000	45.000000	88.000000	43.000000
RBI	47.000000	49.000000	54.000000	48.000000	50.000000	41.000000
Walks	12.000000	65.000000	79.000000	63.000000	77.000000	30.000000
Years	2.000000	2.000000	9.000000	7.000000	4.000000	14.000000
CAtBat	1038.000000	978.000000	4739.000000	1493.000000	1556.000000	5885.000000
CHits	271.000000	249.000000	1169.000000	359.000000	470.000000	1543.000000
CHmRun	3.000000	36.000000	13.000000	61.000000	38.000000	104.000000
CRuns	129.000000	168.000000	583.000000	176.000000	245.000000	751.000000
CRBI	80.000000	91.000000	374.000000	202.000000	167.000000	714.000000
CWalks	24.000000	101.000000	528.000000	175.000000	174.000000	535.000000
PutOuts	261.000000	325.000000	229.000000	682.000000	250.000000	58.000000
Assists	459.000000	13.000000	453.000000	93.000000	11.000000	141.000000
Errors	22.000000	3.000000	15.000000	13.000000	1.000000	23.000000
bSalary	6.852483	7.083499	11.55288	9.415767	9.553321	8.558048
	187	188	189	190	191	192
AtBat	540.000000	437.000000	237.000000	236.000000	473.000000	309.000000

Homework4

Hits	135.000000	123.00000	52.000000	56.000000	154.000000	72.00000
HmRun	30.000000	9.00000	0.000000	6.000000	6.000000	0.00000
Runs	82.000000	62.00000	15.000000	41.000000	61.000000	33.00000
RBI	88.000000	55.00000	25.000000	19.000000	48.000000	31.00000
Walks	55.000000	40.00000	30.000000	21.000000	29.000000	26.00000
Years	1.000000	9.00000	24.000000	5.000000	6.000000	5.00000
CAtBat	540.000000	4139.00000	14053.000000	1257.000000	1966.000000	354.00000
CHits	135.000000	1203.00000	4256.000000	329.000000	566.000000	82.00000
CHmRun	30.000000	79.00000	160.000000	24.000000	29.000000	0.00000
CRuns	82.000000	676.00000	2165.000000	166.000000	250.000000	41.00000
CRBI	88.000000	390.00000	1314.000000	125.000000	252.000000	32.00000
CWalks	55.000000	364.00000	1566.000000	105.000000	178.000000	26.00000
PutOuts	157.000000	82.00000	523.000000	172.000000	846.000000	117.00000
Assists	6.000000	170.00000	43.000000	1.000000	84.000000	269.00000
Errors	14.000000	15.00000	6.000000	4.000000	9.000000	12.00000
bSalary	6.822803	10.62014	9.553321	6.994377	9.045847	6.34968
	193	194	195	196	197	198
AtBat	271.000000	357.000000	216.000000	256.0000	466.000000	327.000000
Hits	77.000000	96.000000	56.000000	70.0000	108.000000	68.000000
HmRun	5.000000	7.000000	4.000000	13.0000	33.000000	13.000000
Runs	35.000000	50.000000	22.000000	42.0000	75.000000	42.000000
RBI	29.000000	45.000000	18.000000	36.0000	86.000000	29.000000
Walks	33.000000	39.000000	15.000000	44.0000	72.000000	45.000000
Years	12.000000	5.000000	12.000000	16.0000	3.000000	18.000000
CAtBat	4933.000000	1394.000000	2796.000000	7058.0000	652.000000	3949.000000
CHits	1358.000000	344.000000	665.000000	1845.0000	142.000000	939.000000
CHmRun	48.000000	43.000000	43.000000	312.0000	44.000000	78.000000
CRuns	630.000000	178.000000	266.000000	965.0000	102.000000	438.000000
CRBI	435.000000	192.000000	304.000000	1128.0000	109.000000	380.000000
CWalks	403.000000	136.000000	198.000000	990.0000	102.000000	466.000000
PutOuts	62.000000	167.000000	391.000000	41.0000	286.000000	659.000000
Assists	90.000000	2.000000	44.000000	118.0000	8.000000	53.000000
Errors	3.000000	4.000000	4.000000	8.0000	8.000000	7.000000
bSalary	8.558048	7.805115	7.476837	10.2386	7.209974	8.336024
	199	200	201	202	203	204
AtBat	341.000000	608.0000	419.000000	376.000000	486.000000	246.000000
Hits	110.000000	160.0000	101.000000	82.000000	145.000000	76.000000
HmRun	9.000000	28.0000	18.000000	21.000000	11.000000	5.000000
Runs	45.000000	130.0000	65.000000	42.000000	51.000000	35.000000
RBI	49.000000	74.0000	58.000000	60.000000	76.000000	39.000000
Walks	46.000000	89.0000	92.000000	35.000000	40.000000	13.000000
Years	9.000000	8.0000	20.000000	5.000000	11.000000	6.000000
CAtBat	2331.000000	4071.0000	9528.000000	1770.000000	3967.000000	912.000000
CHits	658.000000	1182.0000	2510.000000	408.000000	1102.000000	234.000000
CHmRun	50.000000	103.0000	548.000000	115.000000	67.000000	12.000000

Homework4

CRuns	249.000000	862.0000	1509.000000	238.000000	410.000000	102.000000
CRBI	322.000000	417.0000	1659.000000	299.000000	497.000000	96.000000
CWalks	274.000000	708.0000	1342.000000	157.000000	284.000000	80.000000
PutOuts	251.000000	426.0000	0.000000	0.000000	88.000000	44.000000
Assists	9.000000	4.0000	0.000000	0.000000	204.000000	0.000000
Errors	4.000000	6.0000	0.000000	0.000000	16.000000	1.000000
bSalary	8.977622	11.2242	8.710503	8.449961	8.758991	7.476837
	205	206	207	208	209	210
AtBat	205.000000	348.000000	523.000000	312.000000	496.000000	126.000000
Hits	52.000000	90.000000	135.000000	68.000000	119.000000	27.000000
HmRun	8.000000	11.000000	8.000000	2.000000	8.000000	3.000000
Runs	31.000000	50.000000	52.000000	32.000000	57.000000	8.000000
RBI	27.000000	45.000000	44.000000	22.000000	33.000000	10.000000
Walks	17.000000	43.000000	52.000000	24.000000	21.000000	5.000000
Years	12.000000	10.000000	9.000000	1.000000	7.000000	4.000000
CAtBat	5134.000000	2288.000000	3368.000000	312.000000	3358.000000	239.000000
CHits	1323.000000	614.000000	895.000000	68.000000	882.000000	49.000000
CHmRun	56.000000	43.000000	39.000000	2.000000	36.000000	3.000000
CRuns	643.000000	295.000000	377.000000	32.000000	365.000000	16.000000
CRBI	445.000000	273.000000	284.000000	22.000000	280.000000	13.000000
CWalks	459.000000	269.000000	296.000000	24.000000	165.000000	14.000000
PutOuts	155.000000	60.000000	367.000000	86.000000	155.000000	190.000000
Assists	3.000000	176.000000	475.000000	150.000000	371.000000	2.000000
Errors	2.000000	6.000000	19.000000	15.000000	29.000000	9.000000
bSalary	8.336024	8.558048	9.553321	5.351515	9.864276	6.994377
	211	212	213	214	215	216
AtBat	275.000000	627.000000	394.000000	208.000000	382.000000	459.000000
Hits	68.000000	178.000000	86.000000	57.000000	101.000000	113.000000
HmRun	5.000000	14.000000	1.000000	8.000000	16.000000	20.000000
Runs	42.000000	68.000000	38.000000	32.000000	50.000000	59.000000
RBI	42.000000	76.000000	28.000000	25.000000	55.000000	57.000000
Walks	61.000000	46.000000	36.000000	18.000000	22.000000	68.000000
Years	6.000000	6.000000	4.000000	3.000000	1.000000	12.000000
CAtBat	961.000000	3146.000000	1089.000000	653.000000	382.000000	5348.000000
CHits	238.000000	902.000000	267.000000	170.000000	101.000000	1369.000000
CHmRun	16.000000	74.000000	3.000000	17.000000	16.000000	155.000000
CRuns	128.000000	494.000000	94.000000	98.000000	50.000000	713.000000
CRBI	104.000000	345.000000	71.000000	54.000000	55.000000	660.000000
CWalks	172.000000	242.000000	76.000000	62.000000	22.000000	735.000000
PutOuts	181.000000	309.000000	203.000000	42.000000	200.000000	0.000000
Assists	3.000000	492.000000	369.000000	94.000000	7.000000	0.000000
Errors	2.000000	5.000000	16.000000	13.000000	6.000000	0.000000
bSalary	7.003475	9.526481	7.476837	6.473573	5.877752	9.526481
	217	218	219	220	221	222
AtBat	549.000000	288.000000	522.000000	512.000000	220.000000	522.000000

Homework4

Hits	149.000000	63.000000	163.00000	117.000000	66.000000	140.000000
HmRun	7.000000	3.000000	9.00000	29.000000	5.000000	16.000000
Runs	73.000000	25.000000	82.00000	54.000000	20.000000	73.000000
RBI	47.000000	33.000000	46.00000	88.000000	28.000000	77.000000
Walks	42.000000	16.000000	62.00000	43.000000	13.000000	60.000000
Years	1.000000	10.000000	13.00000	6.000000	3.000000	4.000000
CAtBat	549.000000	2682.000000	7037.00000	1750.000000	290.000000	730.000000
CHits	149.000000	667.000000	2019.00000	412.000000	80.000000	185.000000
CHmRun	7.000000	38.000000	153.00000	100.000000	5.000000	22.000000
CRuns	73.000000	315.000000	1043.00000	204.000000	27.000000	93.000000
CRBI	47.000000	259.000000	827.00000	276.000000	31.000000	106.000000
CWalks	42.000000	204.000000	535.00000	155.000000	15.000000	86.000000
PutOuts	255.000000	135.000000	352.00000	1236.000000	281.000000	1320.000000
Assists	450.000000	257.000000	9.00000	98.000000	21.000000	166.000000
Errors	17.000000	7.000000	1.00000	18.000000	3.000000	17.000000
bSalary	6.473573	8.043145	10.13773	5.918716	5.748955	7.083499
	223	224	225	226	227	228
AtBat	461.000000	581.000000	530.000000	557.00000	439.000000	453.000000
Hits	112.000000	145.000000	159.00000	142.00000	96.000000	103.000000
HmRun	18.000000	17.000000	3.00000	21.00000	0.000000	8.000000
Runs	54.000000	66.000000	82.00000	58.00000	44.000000	53.000000
RBI	54.000000	68.000000	50.00000	81.00000	36.000000	33.000000
Walks	35.000000	21.000000	47.00000	23.00000	65.000000	52.000000
Years	2.000000	2.000000	6.00000	18.00000	4.000000	2.000000
CAtBat	680.000000	831.000000	1619.00000	8759.00000	711.000000	507.000000
CHits	160.000000	210.000000	426.00000	2583.00000	148.000000	123.000000
CHmRun	24.000000	21.000000	11.00000	271.00000	1.000000	8.000000
CRuns	76.000000	106.000000	218.00000	1138.00000	68.000000	63.000000
CRBI	75.000000	86.000000	149.00000	1299.00000	56.000000	39.000000
CWalks	49.000000	40.000000	163.00000	478.00000	99.000000	58.000000
PutOuts	111.000000	320.000000	196.00000	1160.00000	229.000000	289.000000
Assists	226.000000	465.000000	354.00000	53.00000	406.000000	407.000000
Errors	11.000000	32.000000	15.00000	7.00000	22.000000	6.000000
bSalary	6.412654	6.645307	8.660888	10.91908	6.589782	5.997965
	229	230	231	232	233	234
AtBat	528.000000	633.000000	562.000000	281.000000	593.00000	687.000000
Hits	122.000000	210.000000	169.000000	76.000000	152.00000	213.000000
HmRun	1.000000	6.000000	17.000000	3.000000	23.000000	10.000000
Runs	67.000000	91.000000	88.000000	42.000000	69.000000	91.000000
RBI	45.000000	56.000000	73.000000	25.000000	75.000000	65.000000
Walks	51.000000	59.000000	53.000000	20.000000	53.000000	27.000000
Years	4.000000	6.000000	8.000000	8.000000	6.000000	4.000000
CAtBat	1716.000000	3070.000000	3181.00000	2658.000000	2765.00000	1518.000000
CHits	403.000000	872.000000	841.00000	657.000000	686.00000	448.000000
CHmRun	12.000000	19.000000	61.000000	48.000000	133.00000	15.000000

CRuns	211.000000	420.000000	450.000000	324.000000	369.000000	196.000000
CRBI	146.000000	230.000000	342.000000	300.000000	384.000000	137.000000
CWalks	155.000000	274.000000	373.000000	179.000000	321.000000	89.000000
PutOuts	209.000000	367.000000	351.000000	106.000000	315.000000	294.000000
Assists	372.000000	432.000000	442.000000	144.000000	10.000000	445.000000
Errors	17.000000	16.000000	17.000000	7.000000	6.000000	13.000000
bSalary	8.087605	5.748955	8.871078	8.043145	10.01054	8.087605
	235	236	237	238	239	240
AtBat	368.000000	263.000000	642.000000	265.000000	559.000000	520.000000
Hits	103.000000	70.000000	211.000000	68.000000	141.000000	120.000000
HmRun	3.000000	1.000000	14.000000	8.000000	2.000000	17.000000
Runs	48.000000	26.000000	107.000000	26.000000	48.000000	53.000000
RBI	28.000000	23.000000	59.000000	30.000000	61.000000	44.000000
Walks	54.000000	30.000000	52.000000	29.000000	73.000000	21.000000
Years	8.000000	4.000000	5.000000	7.000000	8.000000	4.000000
CAtBat	1897.000000	888.000000	2364.000000	1337.000000	3162.000000	927.000000
CHits	493.000000	220.000000	770.000000	339.000000	874.000000	227.000000
CHmRun	9.000000	9.000000	27.000000	32.000000	16.000000	22.000000
CRuns	207.000000	83.000000	352.000000	135.000000	421.000000	106.000000
CRBI	162.000000	82.000000	230.000000	163.000000	349.000000	80.000000
CWalks	198.000000	86.000000	193.000000	128.000000	359.000000	52.000000
PutOuts	209.000000	81.000000	337.000000	92.000000	352.000000	70.000000
Assists	246.000000	147.000000	19.000000	5.000000	414.000000	144.000000
Errors	3.000000	4.000000	4.000000	3.000000	9.000000	11.000000
bSalary	7.960609	7.476837	9.526481	8.449961	9.97761	6.948229
	241	242	243	244	245	246
AtBat	19.000000	205.000000	193.000000	213.000000	510.000000	578.000000
Hits	4.000000	43.000000	47.000000	61.000000	147.000000	138.000000
HmRun	1.000000	2.000000	10.000000	4.000000	10.000000	1.000000
Runs	2.000000	24.000000	21.000000	17.000000	56.000000	56.000000
RBI	3.000000	17.000000	29.000000	22.000000	52.000000	59.000000
Walks	1.000000	20.000000	24.000000	3.000000	53.000000	34.000000
Years	1.000000	7.000000	6.000000	17.000000	7.000000	3.000000
CAtBat	19.000000	854.000000	1136.000000	4061.000000	2872.000000	1399.000000
CHits	4.000000	219.000000	256.000000	1145.000000	821.000000	357.000000
CHmRun	1.000000	12.000000	42.000000	83.000000	63.000000	7.000000
CRuns	2.000000	105.000000	129.000000	488.000000	307.000000	149.000000
CRBI	3.000000	99.000000	139.000000	491.000000	340.000000	161.000000
CWalks	1.000000	71.000000	106.000000	244.000000	174.000000	87.000000
PutOuts	692.000000	131.000000	299.000000	178.000000	810.000000	133.000000
Assists	70.000000	6.000000	13.000000	45.000000	99.000000	371.000000
Errors	8.000000	1.000000	5.000000	4.000000	18.000000	20.000000
bSalary	9.966527	7.722673	7.440846	7.366846	10.42807	6.699251
	247	248	249	250	251	252
AtBat	441.000000	172.000000	127.000000	279.000000	480.000000	600.000000

Homework4

Hits	113.000000	42.000000	32.000000	69.000000	112.000000	139.000000
HmRun	5.000000	3.000000	4.000000	4.000000	18.000000	0.000000
Runs	76.000000	17.000000	14.000000	35.000000	50.000000	94.000000
RBI	52.000000	14.000000	25.000000	31.000000	71.000000	29.000000
Walks	76.000000	15.000000	12.000000	32.000000	44.000000	60.000000
Years	5.000000	10.000000	19.000000	4.000000	7.000000	2.000000
CAtBat	1546.000000	4086.000000	8396.000000	1359.000000	3031.000000	1236.000000
CHits	397.000000	1150.000000	2402.000000	355.000000	771.000000	309.000000
CHmRun	17.000000	57.000000	242.000000	31.000000	110.000000	1.000000
CRuns	226.000000	579.000000	1048.000000	180.000000	338.000000	201.000000
CRBI	149.000000	363.000000	1348.000000	148.000000	406.000000	69.000000
CWalks	191.000000	406.000000	819.000000	158.000000	239.000000	110.000000
PutOuts	160.000000	65.000000	167.000000	133.000000	94.000000	300.000000
Assists	290.000000	0.000000	18.000000	173.000000	270.000000	12.000000
Errors	11.000000	0.000000	6.000000	9.000000	16.000000	9.000000
bSalary	8.449961	9.921648	8.758991	7.663974	9.553321	6.699251
	253	254	255	256	257	258
AtBat	610.000000	360.000000	387.000000	580.000000	408.000000	593.000000
Hits	186.000000	81.000000	124.000000	207.000000	117.000000	172.000000
HmRun	19.000000	5.000000	1.000000	8.000000	11.000000	22.000000
Runs	107.000000	37.000000	67.000000	107.000000	66.000000	82.000000
RBI	98.000000	44.000000	27.000000	71.000000	41.000000	100.000000
Walks	74.000000	37.000000	36.000000	105.000000	34.000000	57.000000
Years	6.000000	7.000000	7.000000	5.000000	1.000000	1.000000
CAtBat	2728.000000	2268.000000	1775.000000	2778.000000	408.000000	593.000000
CHits	753.000000	566.000000	506.000000	978.000000	117.000000	172.000000
CHmRun	69.000000	41.000000	6.000000	32.000000	11.000000	22.000000
CRuns	399.000000	279.000000	272.000000	474.000000	66.000000	82.000000
CRBI	366.000000	257.000000	125.000000	322.000000	41.000000	100.000000
CWalks	286.000000	246.000000	194.000000	417.000000	34.000000	57.000000
PutOuts	1182.000000	170.000000	186.000000	121.000000	942.000000	1222.000000
Assists	96.000000	284.000000	290.000000	267.000000	72.000000	139.000000
Errors	13.000000	3.000000	17.000000	19.000000	11.000000	15.000000
bSalary	10.68628	8.852798	8.942687	11.13123	6.216943	6.751707
	259	260	261	262	263	
AtBat	497.000000	492.000000	475.000000	573.000000	631.000000	
Hits	127.000000	136.000000	126.000000	144.000000	170.000000	
HmRun	7.000000	5.000000	3.000000	9.000000	9.000000	
Runs	65.000000	76.000000	61.000000	85.000000	77.000000	
RBI	48.000000	50.000000	43.000000	60.000000	44.000000	
Walks	37.000000	94.000000	52.000000	78.000000	31.000000	
Years	5.000000	12.000000	6.000000	8.000000	11.000000	
CAtBat	2703.000000	5511.000000	1700.000000	3198.000000	4908.000000	
CHits	806.000000	1511.000000	433.000000	857.000000	1457.000000	
CHmRun	32.000000	39.000000	7.000000	97.000000	30.000000	

CRuns	379.000000	897.000000	217.000000	470.00000	775.00000
CRBI	311.000000	451.000000	93.000000	420.00000	357.00000
CWalks	138.000000	875.000000	146.000000	332.00000	249.00000
PutOuts	325.000000	313.000000	37.000000	1314.00000	408.00000
Assists	9.000000	381.000000	113.000000	131.00000	4.00000
Errors	3.000000	20.000000	7.000000	12.00000	3.00000
bSalary	9.415767	9.864276	8.264562	10.05372	10.13773

\$y

[1]	475.000	480.000	500.000	91.500	750.000	70.000	100.000	75.000
[9]	1100.000	517.143	512.500	550.000	700.000	240.000	775.000	175.000
[17]	135.000	100.000	115.000	600.000	776.667	765.000	708.333	750.000
[25]	625.000	900.000	110.000	612.500	300.000	850.000	90.000	67.500
[33]	180.000	305.000	215.000	247.500	815.000	875.000	70.000	1200.000
[41]	675.000	415.000	340.000	416.667	1350.000	90.000	275.000	230.000
[49]	225.000	950.000	75.000	105.000	320.000	850.000	535.000	933.333
[57]	850.000	210.000	325.000	275.000	450.000	1975.000	1900.000	600.000
[65]	1041.667	110.000	260.000	475.000	431.500	1220.000	70.000	145.000
[73]	595.000	1861.460	300.000	490.000	2460.000	375.000	750.000	1175.000
[81]	70.000	1500.000	385.000	1925.571	215.000	900.000	155.000	700.000
[89]	535.000	362.500	733.333	200.000	400.000	400.000	737.500	500.000
[97]	600.000	662.500	950.000	750.000	297.500	325.000	87.500	175.000
[105]	90.000	1237.500	430.000	100.000	165.000	250.000	1300.000	773.333
[113]	1008.333	275.000	775.000	850.000	365.000	95.000	110.000	100.000
[121]	277.500	80.000	600.000	200.000	657.000	75.000	2412.500	250.000
[129]	155.000	640.000	300.000	110.000	825.000	195.000	450.000	630.000
[137]	86.500	1300.000	1000.000	1800.000	1310.000	737.500	625.000	125.000
[145]	1043.333	725.000	300.000	365.000	75.000	1183.333	202.500	225.000
[153]	525.000	265.000	787.500	800.000	587.500	145.000	420.000	75.000
[161]	575.000	780.000	90.000	150.000	700.000	550.000	650.000	68.000
[169]	100.000	670.000	175.000	137.000	2127.333	875.000	120.000	140.000
[177]	210.000	800.000	240.000	350.000	175.000	200.000	1940.000	700.000
[185]	750.000	450.000	172.000	1260.000	750.000	190.000	580.000	130.000
[193]	450.000	300.000	250.000	1050.000	215.000	400.000	560.000	1670.000
[201]	487.500	425.000	500.000	250.000	400.000	450.000	750.000	70.000
[209]	875.000	190.000	191.000	740.000	250.000	140.000	97.500	740.000
[217]	140.000	341.667	1000.000	100.000	90.000	200.000	135.000	155.000
[225]	475.000	1450.000	150.000	105.000	350.000	90.000	530.000	341.667
[233]	940.000	350.000	326.667	250.000	740.000	425.000	925.000	185.000
[241]	920.000	286.667	245.000	235.000	1150.000	160.000	425.000	900.000
[249]	500.000	277.500	750.000	160.000	1300.000	525.000	550.000	1600.000
[257]	120.000	165.000	700.000	875.000	385.000	960.000	1000.000	

\$W

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$1  
[1] 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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$delrsq  
[1] 0.01
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\$ns
[1] 1

\$tx

	AtBat	Hits	HmRun	Runs	RBI
1	0.0956062233	-0.0581211399	0.0184133204	0.084046774	0.0091109020
2	-0.0768700340	0.0659252882	-0.0469777090	-0.027211492	-0.0148450878
3	-0.0960597420	0.0882556438	-0.0458181282	-0.025506951	-0.0059387029
4	0.0877186632	-0.0444569029	-0.0149888816	0.050428700	0.0138073799
5	-0.2129981916	0.1442981996	0.0439446168	-0.049207215	-0.0114354319
6	0.2327372667	-0.1977422238	0.0761294350	0.085690055	-0.0196361585
7	0.1166628352	-0.0813880370	0.0840493831	0.084046774	0.0026068105
8	0.0851431302	-0.0581211399	0.0229312271	0.080350887	0.0159128243
9	0.0127015935	-0.0325099663	-0.0473338215	0.013802682	-0.0193351741
10	-0.1881965112	0.1239317948	-0.0453229454	-0.160789157	-0.0100913970
11	0.2158292609	-0.1461769334	0.0439446168	0.064190391	0.0053963670
12	0.0014365367	0.0254814660	-0.0376077247	0.018002051	-0.0190651087
13	0.1757931148	-0.1236171189	0.0840493831	0.067615042	-0.0154656018
14	0.2218041039	-0.1784052399	0.0184133204	0.070929904	0.0067890215
15	-0.1807560070	0.1219471442	-0.0458181282	-0.099774639	-0.0100913970
16	0.2277579058	-0.1687367480	0.0666219555	0.084046774	-0.0196361585
17	0.2914887669	-0.2138563771	0.0001713508	0.099948098	-0.0001735606
18	0.0059790005	-0.0325099663	-0.0458527053	-0.042940012	-0.0062646785
19	-0.0070915260	0.0153615576	0.0553048017	0.005777425	0.0113446095
20	-0.0680447422	0.0306071937	-0.0458527053	-0.007795392	-0.0194767736
21	-0.2564011324	0.1422325309	-0.0469777090	-0.046074034	0.0174463792
22	-0.2043176035	0.1319640051	0.0439446168	-0.109970948	-0.0114354319
23	0.0838684727	-0.0813880370	0.0439446168	0.061641223	-0.0057343029
24	-0.0702435799	0.0639232534	-0.0149888816	0.009035407	-0.0144331001
25	-0.1584303228	0.1099273896	0.0229312271	-0.109970948	0.0090289397
26	-0.1125613490	0.0795799726	-0.0458181282	-0.103172588	0.0107412122

27	0.0006190481	0.0124860035	0.0229312271	0.005777425	0.0113350062
28	-0.1993572674	0.1422325309	-0.0473338215	-0.079409224	-0.0038077096
29	0.2138412574	-0.1590682560	0.0229312271	0.085690055	0.0039988794
30	0.0262372693	0.0058800320	-0.0149888816	0.053902623	-0.0181782400
31	0.1456585965	-0.1236171189	0.0314110038	0.084046774	0.0039988794
32	0.2367218119	-0.1848509012	0.0761294350	0.102202965	-0.0015637462
33	0.2002984330	-0.1687367480	0.0184133204	0.061641223	-0.0043441173
34	0.1597651510	-0.0978344737	0.0666219555	0.074254368	0.0053963670
35	0.0034725346	0.0694349693	0.0184133204	0.004350234	-0.0083120428
36	0.2129167063	-0.1332856108	0.0001713508	0.061936658	0.0159128243
37	-0.1288833048	0.0975808547	-0.0376077247	-0.040105351	-0.0172468562
38	-0.0483763609	-0.0106578687	-0.0399249996	0.040072080	-0.0196060685
39	0.2034936978	-0.1461769334	0.0666219555	0.067615042	0.0095458710
40	-0.2092779395	0.1422325309	-0.0463126147	-0.069227379	-0.0148450878
41	0.0115065002	-0.0106578687	-0.0278225091	0.028111675	-0.0139178433
42	0.0103366071	-0.0078253324	-0.0469777090	0.013802682	0.0011581008
43	0.1703458686	-0.1300627802	-0.0083745008	0.074254368	0.0039988794
44	0.0981539563	-0.0661326416	0.0229312271	0.061641223	0.0141642061
45	-0.2539209643	0.1607604647	-0.0434352913	-0.130332471	-0.0028028437
46	0.0034725346	0.0254814660	-0.0438907215	0.001567321	-0.0179463648
47	0.2629515341	-0.1751824093	0.0229312271	0.089392867	0.0012166250
48	0.1790197130	-0.1365084415	0.0840493831	0.077576883	-0.0099048596
49	0.2013445605	-0.1461769334	0.0761294350	0.064190391	-0.0099048596
50	-0.2018374354	0.0838248328	-0.0403365883	-0.113368643	0.0097854604
51	0.2188199505	-0.1461769334	0.0314110038	0.070929904	-0.0001735606
52	-0.1226647223	0.0900713425	-0.0458181282	-0.028838809	0.0021439530
53	0.1011190749	-0.0581211399	0.0553048017	0.040072080	0.0114595254
54	-0.1117536067	0.0677320112	-0.0429821918	-0.034415326	0.0116986248
55	-0.1064173682	0.0448241951	-0.0415131828	-0.062439483	0.0011581008
56	-0.1326868527	0.0795799726	-0.0429821918	-0.089591069	0.0126554938
57	-0.0047140003	0.0367583321	0.0229312271	0.004350234	-0.0013190329
58	0.0518031827	-0.0194577160	0.0439446168	0.005777425	0.0095458710
59	0.0197679180	-0.0046606267	-0.0426845419	-0.002523143	-0.0039344523
60	0.0648288250	-0.0219036446	0.0439446168	0.056882266	0.0095458710
61	0.1588058226	-0.0913779314	0.0184133204	0.013802682	0.0146273423
62	-0.3159251655	0.2862224176	-0.0403365883	-0.194558663	0.0280136567
63	-0.2377998721	0.1319640051	-0.0415131828	-0.099774639	-0.0008179476
64	0.0778216875	-0.0533360324	-0.0083745008	0.009035407	0.0107941424
65	-0.2663218046	0.1545920584	-0.0403365883	-0.099774639	0.0308973050
66	0.1347907032	-0.0556911509	-0.0458527053	0.031789863	0.0017992221
67	0.2629515341	-0.1848509012	-0.0278225091	0.089392867	0.0095458710
68	-0.0497522580	0.0273508645	-0.0376077247	-0.028838809	-0.0145943464
69	0.0970103480	-0.0533360324	-0.0376077247	0.050428700	-0.0013190329
70	-0.0716496994	0.0479098358	-0.0425218669	-0.055652259	0.0088363322
71	0.0928653046	-0.0661326416	0.0184133204	0.061729192	0.0146273423

72	-0.1107399731	0.0815401363	-0.0434352913	-0.055652259	0.0116986248
73	0.0237862257	0.0367583321	-0.0376077247	0.006054224	-0.0153452356
74	-0.1770349712	0.1017207056	-0.0438907215	-0.103172588	0.0193648588
75	0.0045284471	0.0290484456	-0.0425218669	-0.126940773	-0.0161765357
76	-0.0047140003	0.0182688538	-0.0426845419	-0.037301336	-0.0039344523
77	-0.0949760841	0.1078859086	-0.0473338215	-0.013262197	0.0001858730
78	0.1823428473	-0.1590682560	0.0666219555	0.043727880	0.0012166250
79	-0.1782753871	0.1139822463	-0.0448309839	-0.055652259	0.0001858730
80	-0.2712821407	0.2039463547	-0.0403365883	-0.140501346	0.0232075763
81	0.2024033317	-0.1526225947	0.0439446168	0.093435025	-0.0057343029
82	-0.0266289128	0.0615286251	-0.0458527053	-0.037301336	-0.0133248936
83	0.0827149008	-0.0715778267	-0.0458527053	0.061126828	-0.0130628349
84	-0.0895250358	0.0537570658	-0.0438907215	-0.072621327	0.0203252654
85	-0.1881965112	0.1099273896	-0.0403365883	-0.106572016	0.0164875791
86	-0.2154783597	0.1484262210	-0.0382612523	-0.106572016	0.0232075763
87	-0.0680447422	0.0342265419	-0.0278225091	-0.021080213	-0.0144848924
88	0.1320288850	-0.0688718135	-0.0399249996	0.028111675	-0.0039344523
89	0.0088147862	-0.0273582454	0.0439446168	0.040072080	0.0113350062
90	0.0803474064	-0.0485008280	0.0553048017	0.067615042	0.0062469868
91	0.0340923095	-0.0219036446	-0.0453229454	0.013802682	-0.0013190329
92	0.0486393936	-0.0688718135	-0.0458527053	0.059728655	-0.0145802649
93	-0.1447856672	0.0838248328	0.0314110038	-0.113368643	-0.0153452356
94	0.0638606049	-0.0509141114	-0.0205630261	-0.017923618	0.0168657975
95	-0.1095175914	0.0564955769	0.0666219555	0.040072080	0.0062469868
96	0.1328818905	-0.0661326416	-0.0376077247	0.056882266	-0.0114354319
97	0.0253966559	0.0391559800	0.0314110038	0.006054224	-0.0114354319
98	-0.2005973514	0.1219471442	-0.0426845419	-0.037301336	0.0001858730
99	-0.1832361751	0.1442981996	-0.0453229454	-0.042940012	0.0040906670
100	0.1076185401	-0.0009904581	-0.0399249996	0.009035407	-0.0153452356
101	0.1968623468	-0.1429541028	-0.0149888816	0.067615042	0.0107941424
102	0.1363394381	-0.0913779314	0.0184133204	0.087488967	0.0090289397
103	-0.0319500682	-0.0152990363	0.0761294350	0.024715820	0.0026068105
104	0.2751756908	-0.1912965625	0.0314110038	0.095559194	0.0114595254
105	0.2327372667	-0.1880737319	0.0439446168	0.085690055	-0.0154656018
106	-0.2067977715	0.1463707189	-0.0341348837	-0.160789157	0.0232075763
107	0.0606588349	-0.0046606267	0.0229312271	0.018002051	0.0113350062
108	-0.0227376453	-0.0046606267	0.0666219555	-0.025506951	0.0159128243
109	-0.2204386957	0.0935662467	-0.0389489804	-0.086197121	0.0318585211
110	-0.2985639891	0.2080612116	-0.0415131828	-0.164162997	0.0357033854
111	0.1834802775	-0.1397312721	-0.0083745008	0.061936658	0.0012166250
112	-0.0768700340	0.0713913633	-0.0149888816	0.018002051	-0.0148450878
113	-0.1313709276	0.0694349693	-0.0453229454	-0.013262197	-0.0117221725
114	0.2578731220	-0.1912965625	0.0001713508	0.095559194	0.0136903621
115	-0.2191986117	0.1730981644	-0.0149888816	-0.069227379	-0.0117221725
116	-0.0972020203	0.0773436433	0.0184133204	0.001567321	0.0091109020

117	0.2077680044	-0.0913779314	-0.0376077247	0.061641223	-0.0114354319
118	0.2670191528	-0.1848509012	0.0439446168	0.080350887	-0.0015637462
119	0.1363394381	-0.0465062712	0.0439446168	0.061126828	0.0091109020
120	0.0629335144	-0.0246871169	0.0229312271	0.018002051	0.0138073799
121	-0.1423882429	0.0996560123	-0.0443516360	0.001567321	0.0040906670
122	0.0139197548	-0.0078253324	0.0553048017	0.005220388	0.0160584910
123	0.1037975674	-0.0273582454	0.0314110038	0.056882266	0.0159128243
124	-0.2402800401	0.1319640051	-0.0425218669	-0.079409224	0.0222458607
125	-0.1943969313	0.1545920584	0.0184133204	-0.028838809	-0.0059387029
126	0.2528185016	-0.1912965625	0.0666219555	0.106712700	-0.0182459729
127	-0.2427602081	0.2080612116	-0.0458181282	-0.130332471	0.0251300084
128	0.1568168985	-0.1042801350	0.0314110038	0.064190391	0.0053963670
129	0.0956062233	-0.0715778267	-0.0376077247	0.061729192	-0.0181782400
130	-0.2092779395	0.1199747848	-0.0458527053	-0.103172588	-0.0059387029
131	0.0109354115	-0.0325099663	-0.0205630261	0.006054224	-0.0083120428
132	0.0956062233	-0.0813880370	0.0314110038	0.085690055	0.0090289397
133	-0.0110250464	-0.0355069079	-0.0278225091	0.043727880	0.0138073799
134	-0.0425661539	-0.0106578687	0.0553048017	0.024715820	0.0113446095
135	0.2337317310	-0.1655139173	0.0314110038	0.091354542	0.0081791887
136	-0.2092779395	0.1751544112	-0.0458181282	-0.079409224	-0.0048317801
137	0.2367218119	-0.1300627802	0.0229312271	0.061936658	0.0012166250
138	-0.0266289128	0.0342265419	-0.0420416760	-0.082803172	0.0021439530
139	-0.0895250358	0.1058399862	-0.0453229454	-0.034415326	-0.0153452356
140	-0.1596705944	0.1484262210	-0.0376077247	-0.116764778	-0.0008179476
141	-0.1584303228	0.0996560123	-0.0415131828	-0.086197121	0.0069411516
142	0.1320288850	-0.0781067518	0.0439446168	0.061936658	0.0095458710
143	-0.1708334887	0.1279353742	-0.0429821918	-0.099774639	0.0116986248
144	0.0790561832	-0.0355069079	-0.0278225091	0.006956756	0.0113446095
145	-0.2030775194	0.1239317948	-0.0278225091	-0.042940012	-0.0048317801
146	-0.1026845786	0.0773436433	0.0314110038	-0.017923618	-0.0062646785
147	0.0593796634	-0.0485008280	-0.0438907215	-0.034415326	-0.0195609782
148	-0.3196454175	0.2553693100	-0.0403365883	-0.201313255	0.0116986248
149	0.1356829132	-0.1107257963	0.0840493831	0.064190391	0.0053963670
150	-0.0823176482	0.0589995414	-0.0458181282	-0.027211492	-0.0194817275
151	-0.0136094679	0.0589995414	0.0001713508	-0.059045534	0.0017992221
152	0.1320288850	-0.0913779314	0.0001713508	0.061126828	0.0090289397
153	-0.0905679842	0.0882556438	-0.0205630261	-0.059045534	-0.0039344523
154	0.2188199505	-0.1493997641	-0.0083745008	0.080350887	0.0081791887
155	-0.2067977715	0.1037822871	-0.0453229454	-0.099774639	0.0021439530
156	0.0803474064	-0.0509141114	-0.0448309839	0.006121188	-0.0194767736
157	-0.0575704800	0.0615286251	-0.0420416760	-0.028838809	0.0097854604
158	0.0658855384	-0.0325099663	-0.0469777090	0.040072080	-0.0181782400
159	-0.2005973514	0.1199747848	-0.0458181282	-0.120158937	-0.0133248936
160	0.2013445605	-0.1429541028	0.0666219555	0.077576883	0.0039988794
161	-0.2514407963	0.1648727759	0.0439446168	-0.116764778	-0.0181782400

162	-0.0884511609	0.0677320112	-0.0463126147	-0.059045534	-0.0145802649
163	0.2088397505	-0.1365084415	-0.0278225091	0.087488967	0.0113350062
164	0.0093109500	-0.0298428296	0.0001713508	0.021349392	0.0114595254
165	-0.0895250358	0.1017207056	-0.0399249996	-0.023402461	-0.0059387029
166	-0.0279785370	0.0677320112	-0.0469777090	-0.031547160	-0.0071563182
167	0.1272499270	-0.1075029656	0.0001713508	0.067615042	0.0113350062
168	0.2088397505	-0.1429541028	0.0553048017	0.082399350	-0.0112950451
169	0.1113097292	-0.0880121741	0.0553048017	0.095559194	0.0114595254
170	0.0767148145	-0.0688718135	-0.0463126147	0.021349392	-0.0139178433
171	-0.1035576482	0.0391559800	-0.0420416760	-0.040105351	-0.0161765357
172	0.1557185095	-0.1236171189	0.0001713508	0.074254368	0.0168657975
173	0.4005824630	-0.3137641272	0.0840493831	0.136025979	-0.0307576430
174	0.0304576521	-0.0273582454	0.0314110038	0.059728655	0.0053963670
175	0.2067142330	-0.1784052399	-0.0149888816	0.080350887	0.0146273423
176	0.1157437780	-0.0748148124	0.0229312271	0.053902623	0.0012166250
177	-0.1906766792	0.1401684804	0.0001713508	-0.099774639	-0.0083120428
178	0.0246310865	0.0182688538	-0.0083745008	-0.013262197	0.0017992221
179	0.1272499270	-0.0715778267	0.0184133204	0.061936658	0.0090289397
180	0.0348846678	-0.0298428296	-0.0083745008	0.035781487	0.0138073799
181	-0.1547092694	0.0795799726	0.0666219555	0.001567321	-0.0039344523
182	-0.1857163431	0.1099273896	-0.0469777090	-0.154042623	-0.0083120428
183	-0.1136375211	0.0935662467	0.0840493831	-0.02838809	-0.0144848924
184	0.0435777602	-0.0607485842	-0.0426845419	0.028111675	-0.0062646785
185	-0.1288833048	0.1319640051	-0.0278225091	-0.096379142	-0.0095409325
186	0.0981539563	-0.0533360324	-0.0083745008	0.035781487	0.0141642061
187	-0.1460263028	0.0748924222	-0.0409512430	-0.076015276	0.0040906670
188	-0.0216051125	0.0479098358	-0.0083745008	-0.017923618	-0.0145802649
189	0.1779741490	-0.1493997641	0.0840493831	0.102202965	0.0039988794
190	0.1790197130	-0.1365084415	0.0229312271	0.043727880	-0.0043441173
191	-0.0689901710	0.1139822463	0.0229312271	-0.013262197	-0.0062646785
192	0.1037975674	-0.0846769729	0.0840493831	0.061126828	0.0136903621
193	0.1427675339	-0.0688718135	0.0314110038	0.061729192	0.0095458710
194	0.0455460829	-0.0219036446	0.0184133204	0.009035407	0.0017992221
195	0.2013445605	-0.1365084415	0.0439446168	0.087488967	-0.0057343029
196	0.1578181033	-0.0913779314	-0.0376077247	0.040072080	0.0113350062
197	-0.0600934445	0.0124860035	-0.0389489804	-0.052381549	0.0021439530
198	0.0803474064	-0.0978344737	-0.0376077247	0.040072080	0.0095458710
199	0.0629335144	0.0182688538	-0.0083745008	0.028111675	-0.0083120428
200	-0.2303593679	0.1259333443	-0.0420416760	-0.238463513	-0.0117221725
201	0.0006190481	-0.0106578687	-0.0469777090	-0.025506951	-0.0153452356
202	0.0287331225	-0.0556911509	-0.0453229454	0.040072080	-0.0181782400
203	-0.0847326327	0.0955485425	-0.0205630261	0.006956756	-0.0085392402
204	0.1682132908	-0.0715778267	0.0314110038	0.061729192	0.0107941424
205	0.2129167063	-0.1493997641	0.0001713508	0.064190391	0.0067890215
206	0.0550013422	-0.0378710710	-0.0205630261	0.009035407	0.0017992221

207	-0.1250194715	0.0748924222	0.0001713508	0.006376074	0.0062469868
208	0.0995603475	-0.0978344737	0.0666219555	0.061641223	-0.0001735606
209	-0.0960597420	0.0367583321	0.0001713508	0.004350234	0.0168657975
210	0.2925083341	-0.2299705303	0.0553048017	0.117987038	-0.0168557874
211	0.1388911257	-0.0978344737	0.0314110038	0.040072080	0.0138073799
212	-0.2539209643	0.1628166200	-0.0399249996	-0.031547160	-0.0085392402
213	0.0165194629	-0.0465062712	0.0761294350	0.053902623	0.0081791887
214	0.2099310428	-0.1332856108	0.0001713508	0.061641223	0.0039988794
215	0.0237862257	-0.0106578687	-0.0458527053	0.009035407	-0.0145802649
216	-0.0509388863	0.0254814660	-0.0458181282	-0.002523143	-0.0145943464
217	-0.1571900365	0.1037822871	0.0184133204	-0.046074034	-0.0039344523
218	0.1272499270	-0.1139486269	0.0553048017	0.082399350	0.0168657975
219	-0.1238607513	0.1319640051	-0.0083745008	-0.076015276	-0.0013190329
220	-0.1117536067	0.0322895772	-0.0415131828	0.006054224	0.0040906670
221	0.1968623468	-0.1042801350	0.0314110038	0.091354542	0.0081791887
222	-0.1238607513	0.0860452983	-0.0458527053	-0.046074034	-0.0071563182
223	-0.0535011951	0.0231349377	-0.0469777090	0.006054224	-0.0144848924
224	-0.1968770993	0.0955485425	-0.0473338215	-0.027211492	-0.0185003462
225	-0.1338584038	0.1239317948	0.0553048017	-0.076015276	-0.0095409325
226	-0.1671126910	0.0900713425	-0.0453229454	0.001567321	-0.0028028437
227	-0.0239399812	-0.0219036446	0.0840493831	0.031789863	0.0113350062
228	-0.0425661539	-0.0046606267	0.0001713508	0.006121188	0.0168657975
229	-0.1313709276	0.0448241951	0.0761294350	-0.028838809	0.0017992221
230	-0.2613614685	0.2286299500	0.0229312271	-0.106572016	-0.0144331001
231	-0.1733141022	0.1442981996	-0.0473338215	-0.096379142	-0.0133248936
232	0.1338861521	-0.0715778267	0.0553048017	0.040072080	0.0039988794
233	-0.2117581076	0.1099273896	-0.0443516360	-0.034415326	-0.0100913970
234	-0.3283260057	0.2348005715	-0.0149888816	-0.106572016	-0.0194817275
235	0.0356904821	-0.0046606267	0.0553048017	0.018002051	0.0081791887
236	0.1506751198	-0.0913779314	0.0761294350	0.080350887	0.0012166250
237	-0.2725222247	0.2306868239	-0.0399249996	-0.160789157	-0.0165344800
238	0.1486295441	-0.0978344737	0.0001713508	0.080350887	0.0114595254
239	-0.1695932493	0.0882556438	0.0666219555	0.018002051	-0.0190651087
240	-0.1213913096	0.0391559800	-0.0473338215	0.006121188	0.0062469868
241	0.4016020303	-0.3040956353	0.0761294350	0.131516244	-0.0265870863
242	0.2129167063	-0.1784052399	0.0666219555	0.084046774	-0.0071244884
243	0.2247770733	-0.1655139173	-0.0149888816	0.089392867	0.0095458710
244	0.2045709951	-0.1203942882	0.0439446168	0.097732937	-0.0001735606
245	-0.1095175914	0.0996560123	-0.0149888816	0.005220388	-0.0130628349
246	-0.1931568473	0.0815401363	0.0761294350	0.005220388	-0.0165344800
247	-0.0266289128	0.0254814660	0.0314110038	-0.055652259	-0.0130628349
248	0.2457566844	-0.1816280706	0.0553048017	0.097732937	-0.0112950451
249	0.2914887669	-0.2138563771	0.0439446168	0.104457833	0.0039988794
250	0.1356829132	-0.0946116430	0.0439446168	0.061729192	0.0136903621
251	-0.0779198432	0.0231349377	-0.0469777090	0.009035407	-0.0161765357

252	-0.2204386957	0.0838248328	0.0840493831	-0.116764778	0.0095458710
253	-0.2328395360	0.1792671343	-0.0463126147	-0.160789157	0.0136131379
254	0.0425158523	-0.0581211399	0.0314110038	0.056882266	0.0062469868
255	0.0205245382	0.0508580541	0.0761294350	-0.028838809	0.0067890215
256	-0.1956370153	0.2224593285	0.0001713508	-0.160789157	-0.0161765357
257	0.0088147862	0.0322895772	-0.0205630261	-0.027211492	0.0141642061
258	-0.2117581076	0.1504801929	-0.0448309839	-0.076015276	0.0155292929
259	-0.0972020203	0.0589995414	0.0184133204	-0.025506951	-0.0062646785
260	-0.0918224212	0.0773436433	0.0314110038	-0.055652259	-0.0095409325
261	-0.0716496994	0.0564955769	0.0553048017	-0.013262197	0.0113446095
262	-0.1869564271	0.0935662467	-0.0083745008	-0.086197121	-0.0181782400
263	-0.2588813004	0.1463707189	-0.0083745008	-0.059045534	0.0062469868
	Walks	Years	CAtBat	CHits	CHmRun
1	1.192389e-02	-0.251876815	-0.399937891	0.108107430	0.019214929
2	2.668302e-05	0.166146535	0.540733564	-0.212819571	0.021561479
3	6.917445e-03	-0.134583059	-1.554636101	0.632089640	-0.123361125
4	1.379837e-03	0.208647486	1.173491880	-0.454126409	0.032059933
5	4.008062e-03	-0.134583059	-0.908196428	0.325652794	0.038815264
6	-1.414555e-02	0.208647486	1.265897822	-0.489929619	0.018480433
7	-3.974835e-02	0.166146535	1.116199800	-0.449853506	0.017277432
8	-3.795870e-02	0.208647486	1.201412804	-0.463266465	0.024507885
9	1.209324e-02	-0.212938511	-1.331152953	0.463935911	-0.148375941
10	1.894884e-02	-0.094781204	-1.026342465	0.441754480	-0.001900018
11	-4.823049e-03	-0.062289802	0.409811336	-0.204748679	0.036471998
12	2.223838e-02	0.124765465	0.601159792	-0.260760286	0.034082278
13	-1.241292e-02	0.041977601	0.376659058	-0.169357769	0.022046963
14	1.379837e-03	-0.212938511	-0.284852234	0.099915078	0.036420006
15	3.370612e-03	-0.290860755	-2.853148178	1.115747012	-0.080476499
16	-2.475302e-02	0.083010563	1.131394495	-0.453515212	0.023263812
17	-2.677407e-02	-0.030603159	1.005554393	-0.406018640	0.037697432
18	1.209324e-02	0.247444332	1.164864928	-0.459615504	0.037943219
19	1.533634e-02	0.247444332	1.158269776	-0.449242965	0.020862055
20	2.263388e-03	0.041977601	0.385282028	-0.186761303	0.020059283
21	1.177450e-02	-0.411468371	-3.045952495	1.248207076	-0.068858248
22	6.659600e-03	0.041977601	-0.005321284	0.034009525	0.038514293
23	-1.241292e-02	0.008490398	0.381966660	-0.185224748	0.033428344
24	1.177450e-02	-0.094781204	0.177558693	-0.091811134	0.022603200
25	-5.761757e-03	0.083010563	0.189546538	-0.066684281	0.036484554
26	-1.671968e-02	-0.251876815	-1.328509416	0.498551067	-0.070646489
27	-1.241292e-02	0.166146535	1.074639805	-0.424824792	0.026994357
28	2.274581e-02	0.083010563	0.529149227	-0.217108430	0.037741185
29	-3.069531e-02	0.008490398	0.710340773	-0.319557173	0.039405898
30	1.379837e-03	-0.251876815	-1.860819485	0.861298867	-0.052768635
31	-2.475302e-02	0.208647486	1.196843540	-0.468126621	0.023263812
32	4.579524e-03	0.208647486	1.256757771	-0.485087931	0.022046963

33	-3.616906e-02	0.124765465	1.022341005	-0.418075669	0.036484554
34	-1.241292e-02	0.041977601	0.870113363	-0.368722423	0.038436372
35	4.579524e-03	0.166146535	0.903515979	-0.345399155	0.037697432
36	-3.616906e-02	0.083010563	0.990921005	-0.398722745	0.036484554
37	-9.339332e-03	0.041977601	0.018295444	0.006274895	0.014516303
38	-1.241292e-02	-0.370397187	-2.027188574	0.765001013	-0.173392791
39	-1.138027e-02	0.208647486	1.259804512	-0.479639996	0.019677695
40	1.192389e-02	-0.062289802	-0.945279007	0.446604291	-0.023270011
41	1.192389e-02	-0.173835279	-1.301470867	0.531075559	-0.070646489
42	-1.571934e-02	0.041977601	0.894873445	-0.372400143	0.039626616
43	4.008062e-03	0.124765465	0.696750968	-0.301141175	0.033717836
44	-3.069531e-02	-0.173835279	-0.555215881	0.207931236	0.036783457
45	6.659600e-03	0.041977601	-0.273598656	0.176928357	-0.041147628
46	-2.275605e-02	0.247444332	1.163343181	-0.446800272	0.037697432
47	-2.475302e-02	-0.330388465	-2.085551384	0.672920625	-0.009867235
48	-3.256115e-02	0.124765465	0.811501849	-0.347137461	0.018480433
49	-1.241292e-02	0.124765465	0.906384936	-0.386319385	0.028221889
50	1.533634e-02	-0.370397187	-2.572794968	0.913970211	-0.203772748
51	-1.414555e-02	0.166146535	1.113665593	-0.442524164	0.026994357
52	1.800875e-02	0.124765465	0.961615489	-0.389968749	0.038066645
53	-7.684784e-03	-0.370397187	-2.950091921	1.063733897	-0.011652873
54	2.445165e-02	-0.251876815	-1.405905462	0.508922418	-0.119787714
55	-1.795872e-02	-0.411468371	-2.687759160	0.889711673	-0.232365954
56	-2.539297e-02	-0.290860755	-2.101484809	0.777465467	-0.182327844
57	-2.876493e-02	-0.062289802	-0.507104929	0.264440204	0.036484554
58	1.192389e-02	0.124765465	0.737247527	-0.287347218	0.037943219
59	1.192389e-02	0.041977601	0.257597553	-0.132318851	0.011016181
60	-1.138027e-02	0.124765465	0.837403224	-0.332783753	0.030761337
61	1.352443e-02	-0.290860755	-1.915871215	0.691606933	-0.059920072
62	2.429347e-02	0.083010563	0.232536385	0.025275679	-0.005376549
63	1.149177e-03	-0.134583059	-1.230940739	0.502691254	-0.159990761
64	2.274581e-02	-0.062289802	-0.600756682	0.192830130	-0.051874386
65	2.274581e-02	-0.251876815	-2.136519273	0.943082915	-0.143015416
66	2.223838e-02	0.208647486	1.157254000	-0.446800272	0.037946663
67	-1.241292e-02	-0.330388465	-1.438693812	0.468106088	-0.084051163
68	2.357902e-02	0.124765465	0.688926563	-0.326862025	0.039909961
69	-2.275605e-02	0.083010563	0.631095791	-0.251453964	0.039909961
70	4.475480e-03	0.124765465	0.443849300	-0.201933178	-0.018801314
71	3.626091e-03	0.247444332	1.213598388	-0.468126621	0.025753655
72	1.642814e-02	0.166146535	1.074133912	-0.415645236	0.039909961
73	4.830654e-03	-0.173835279	0.278578698	-0.100344211	0.034082278
74	-1.109025e-03	-0.251876815	-2.434581786	0.983986856	-0.194837372
75	8.836014e-03	0.166146535	1.013698814	-0.403666573	0.037872848
76	4.830654e-03	0.008490398	0.279846645	-0.140955637	0.034612232
77	-2.255876e-03	-0.094781204	-1.552469263	0.704065350	-0.168031874

78	-1.896963e-02	-0.030603159	0.688926563	-0.298843058	0.025753655
79	1.352443e-02	-0.251876815	-1.804220459	0.637628600	-0.039359618
80	1.171608e-02	0.083010563	0.280323134	-0.086670734	-0.004201294
81	-3.256115e-02	0.247444332	1.265390042	-0.484482721	0.022046963
82	-4.581771e-03	-0.251876815	-2.108900620	0.992306514	-0.109067388
83	6.917445e-03	0.083010563	0.604438280	-0.288648650	0.018211575
84	1.533634e-02	-0.212938511	-1.784619630	0.681225790	-0.164458075
85	1.317876e-02	0.166146535	0.877137581	-0.354122387	0.028038088
86	2.445165e-02	0.041977601	-0.091129900	0.017600087	-0.017907392
87	1.379837e-03	0.124765465	0.972473793	-0.401879365	0.034923976
88	-7.684784e-03	-0.330388465	-2.196564702	0.864070810	-0.153736598
89	1.101578e-02	-0.062289802	-0.465783100	0.130237872	0.023492106
90	-1.571934e-02	-0.030603159	0.275143305	-0.122040231	0.037943219
91	1.758806e-02	-0.290860755	-2.274196825	0.907039196	-0.128721265
92	1.171608e-02	-0.495644720	-3.204095361	1.045702684	-0.265426849
93	7.742267e-03	0.083010563	0.624473576	-0.276387164	0.032059933
94	2.223838e-02	0.083010563	0.598896698	-0.271652009	0.036192957
95	4.008062e-03	-0.134583059	-1.519671274	0.634169683	0.037741185
96	-1.178424e-04	0.083010563	0.527691252	-0.216190227	0.017323111
97	2.429147e-03	-0.030603159	-0.225095854	0.155950239	-0.004201294
98	1.234860e-02	0.083010563	0.163771806	-0.063863430	0.023698743
99	1.008404e-02	0.008490398	-0.561605020	0.286292290	-0.047404618
100	-9.287369e-03	0.008490398	-0.139009211	0.097574951	0.025872521
101	2.429147e-03	0.083010563	0.775478470	-0.326226438	0.033457343
102	-1.896963e-02	-0.411468371	-2.380742018	0.982597766	-0.092092872
103	-1.178424e-04	0.124765465	1.060952224	-0.437034754	0.018480433
104	-2.475302e-02	-0.062289802	1.050300969	-0.423600485	0.037943219
105	-1.896963e-02	0.166146535	1.108595822	-0.439474640	0.025753655
106	7.742267e-03	0.041977601	0.180880101	-0.065643301	-0.036677839
107	1.177450e-02	-0.290860755	-0.871112617	0.367437726	0.018819637
108	5.569611e-03	0.208647486	1.151165626	-0.452904288	0.019677695
109	1.209324e-02	0.208647486	1.021329451	-0.410195628	0.034612232
110	3.626091e-03	0.124765465	0.636380975	-0.251928953	0.024314995
111	1.800875e-02	-0.173835279	-0.906601975	0.381330671	-0.095666957
112	2.351667e-02	-0.370397187	-2.533304981	1.028366597	-0.059026972
113	1.171608e-02	0.041977601	0.021807683	-0.033311412	-0.009059418
114	-1.241292e-02	-0.251876815	0.281018957	-0.142071033	0.025246543
115	3.626091e-03	0.083010563	0.101630405	0.006274895	0.039405898
116	-7.684784e-03	-0.134583059	-0.623465608	0.278617368	0.033457343
117	-2.318445e-03	-0.290860755	-0.713179143	0.323492373	-0.009059418
118	-1.728985e-02	0.208647486	1.228323014	-0.474190065	0.028221889
119	1.800875e-02	0.247444332	1.233400541	-0.463266465	0.022046963
120	-1.571934e-02	-0.094781204	-0.144212649	0.086303940	0.009766238
121	2.223838e-02	-0.094781204	-0.030339528	0.019281107	-0.009059418
122	4.599152e-03	0.083010563	1.034540589	-0.413823475	0.022046963

123	-7.684784e-03	-0.212938511	-1.019460378	0.462543712	0.024314995
124	3.626091e-03	0.166146535	0.641845916	-0.270930015	0.020987841
125	2.044622e-02	0.041977601	-0.191117714	0.141133859	0.036484554
126	-2.275605e-02	0.166146535	1.275037869	-0.488719197	0.019677695
127	1.533634e-02	-0.212938511	-2.349305597	1.039461284	-0.235940105
128	3.626091e-03	-0.251876815	-0.644110796	0.216467977	0.036424856
129	-9.287369e-03	0.166146535	1.054870373	-0.423600485	0.037697432
130	-7.684784e-03	0.124765465	0.336241302	-0.143939715	0.029340015
131	-1.896963e-02	0.041977601	0.686687664	-0.306939963	0.039023120
132	-2.275605e-02	0.124765465	1.146094465	-0.449853506	0.024507885
133	2.177627e-02	-0.212938511	-1.534475447	0.508922418	0.007442424
134	1.642814e-02	0.166146535	0.895689463	-0.380809684	0.024507885
135	-1.896963e-02	-0.134583059	-0.335832167	0.148541760	0.016639647
136	1.008404e-02	0.083010563	0.506853254	-0.208866366	0.033457343
137	-1.241292e-02	0.247444332	1.282654574	-0.480245455	0.024507885
138	8.836014e-03	-0.030603159	-0.019582339	0.036698895	-0.034889975
139	4.008062e-03	-0.251876815	-1.817963482	0.814869322	-0.030420781
140	-2.167584e-02	-0.212938511	-1.798926622	0.815560968	-0.036677839
141	5.569611e-03	0.041977601	-0.067014126	0.092176670	-0.026844831
142	-1.241292e-02	-0.094781204	-0.648858793	0.275792091	0.004755879
143	1.101578e-02	0.124765465	0.454978773	-0.202233973	0.020987841
144	4.579524e-03	0.208647486	1.200905088	-0.458398239	0.032059933
145	2.429347e-02	-0.062289802	-0.206239575	0.141133859	0.007442424
146	-8.142513e-03	-0.094781204	-0.386169247	0.209751833	0.038737854
147	-1.417796e-02	0.008490398	0.914007893	-0.383573715	0.021244592
148	4.599152e-03	0.166146535	0.383506396	-0.106195237	0.036783457
149	1.379837e-03	0.247444332	1.232892816	-0.476612904	0.017277432
150	9.926543e-03	0.008490398	-0.166352102	0.115154986	-0.025950978
151	2.044622e-02	0.208647486	1.036069312	-0.401879365	0.028221889
152	-4.823049e-03	-0.173835279	-0.945807408	0.387577353	-0.006447828
153	6.917445e-03	-0.290860755	-0.846218993	0.400075375	0.006383069
154	-1.414555e-02	0.041977601	0.966581032	-0.399299909	0.039023120
155	1.317876e-02	0.008490398	-0.457596035	0.177525626	-0.013439635
156	1.008404e-02	-0.094781204	-0.836679972	0.318584050	-0.111747619
157	2.445165e-02	-0.212938511	-1.660853917	0.616170376	-0.109960912
158	-1.414555e-02	0.166146535	1.028441201	-0.403105803	0.036420006
159	1.424866e-02	-0.094781204	-1.065021175	0.455613564	-0.005376549
160	4.579524e-03	0.247444332	1.264882279	-0.482666957	0.019677695
161	1.209324e-02	0.083010563	0.503056358	-0.197713241	0.032059933
162	4.599152e-03	0.008490398	0.320352841	-0.136858064	0.021931594
163	-1.728985e-02	0.208647486	1.264882279	-0.480245455	0.032059933
164	1.379837e-03	0.208647486	0.885279086	-0.373165821	0.034923976
165	2.421356e-02	-0.212938511	-0.373971486	0.231648952	-0.023270011
166	4.579524e-03	0.041977601	0.653266229	-0.256444120	0.035941288
167	-4.823049e-03	-0.062289802	-0.066653717	-0.008855732	0.025872521

168	-3.069531e-02	0.247444332	1.268436724	-0.482666957	0.020862055
169	4.830654e-03	0.166146535	1.199889820	-0.469341610	0.020862055
170	-4.823049e-03	0.041977601	0.383506396	-0.164267053	-0.001900018
171	2.402922e-02	0.166146535	0.826731355	-0.354792199	0.026842844
172	-1.896963e-02	0.166146535	1.050810613	-0.412009107	0.038514293
173	-5.227588e-02	0.208647486	1.353743825	-0.509901578	0.019677695
174	1.533634e-02	0.008490398	0.362823974	-0.161502568	0.038534008
175	1.192389e-02	0.166146535	1.121769873	-0.444964375	0.034923976
176	-7.684784e-03	0.166146535	1.080216907	-0.418075669	0.026994357
177	2.177627e-02	0.124765465	0.958111020	-0.371528232	0.038815264
178	3.626091e-03	0.008490398	-0.171219810	0.107182311	0.033457343
179	-2.475302e-02	0.124765465	0.530172824	-0.249421895	0.037943219
180	2.421356e-02	0.083010563	0.737247527	-0.308309924	0.026842844
181	-3.069531e-02	0.208647486	0.850551572	-0.346579500	0.020862055
182	1.209324e-02	0.208647486	0.880696868	-0.361137679	0.036420006
183	-3.411749e-03	-0.062289802	-1.083561798	0.350726898	0.033428344
184	1.424866e-02	0.008490398	0.611453749	-0.283111319	0.022603200
185	-1.109025e-03	0.124765465	0.577020158	-0.202233973	0.034612232
186	1.379837e-03	-0.251876815	-1.690500068	0.609941256	-0.015226686
187	2.351667e-02	0.247444332	1.100489197	-0.433374074	0.039023120
188	1.177450e-02	-0.062289802	-0.765715931	0.374386039	0.012213517
189	1.379837e-03	-0.663869978	-6.094535357	2.490973754	-0.065282999
190	-1.414555e-02	0.083010563	0.737749392	-0.304020306	0.037697432
191	-1.178424e-04	0.041977601	0.363888265	-0.123449324	0.039626616
192	-7.684784e-03	0.083010563	1.194812863	-0.465698193	0.017277432
193	4.579524e-03	-0.173835279	-1.186396557	0.481958226	0.034848550
194	1.192389e-02	0.083010563	0.665213459	-0.293224311	0.037116473
195	-2.475302e-02	-0.173835279	-0.056800174	-0.038733780	0.037116473
196	1.557976e-02	-0.330388465	-2.312539945	0.819027610	-0.201092135
197	4.475480e-03	0.166146535	1.043695658	-0.429097826	0.037741185
198	1.800875e-02	-0.411468371	-0.664697106	0.185947248	0.013409103
199	2.026704e-02	-0.062289802	0.177558693	-0.044740898	0.032208332
200	-1.548064e-02	-0.030603159	-0.729703343	0.359777303	-0.014333063
201	-1.919776e-02	-0.495644720	-3.643862511	1.280108453	-0.411967030
202	4.008062e-03	0.083010563	0.464850807	-0.249421895	-0.025057366
203	1.177450e-02	-0.134583059	-0.674277235	0.303843071	0.020059283
204	-2.876493e-02	0.041977601	0.913400283	-0.369903852	0.032059933
205	-2.080409e-02	-0.173835279	-1.292984759	0.457688049	0.025246543
206	1.352443e-02	-0.094781204	0.199613181	-0.083077418	0.037116473
207	2.445165e-02	-0.062289802	-0.357219685	0.152238386	0.033603197
208	-1.033732e-02	0.247444332	1.216137040	-0.474190065	0.019677695
209	-1.414555e-02	0.008490398	-0.352104497	0.142603034	0.036420006
210	-4.332764e-02	0.124765465	1.253203319	-0.485693142	0.020862055
211	1.642814e-02	0.041977601	0.889330738	-0.367574726	0.037943219
212	2.026704e-02	0.041977601	-0.239940963	0.157320705	0.016639647

213	4.830654e-03	0.124765465	0.824715746	-0.349225969	0.020862055
214	-1.896963e-02	0.166146535	1.043185616	-0.412009107	0.038514293
215	-1.241292e-02	0.247444332	1.180598290	-0.454126409	0.037943219
216	8.836014e-03	-0.173835279	-1.406409076	0.489563943	-0.060813576
217	1.234860e-02	0.247444332	1.095925540	-0.424824792	0.025753655
218	-2.275605e-02	-0.094781204	0.001118822	-0.036892559	0.034612232
219	1.533634e-02	-0.212938511	-2.301345958	0.939617110	-0.059026972
220	1.352443e-02	0.041977601	0.475206551	-0.246403868	-0.011652873
221	-2.876493e-02	0.166146535	1.227307505	-0.466911679	0.023263812
222	1.758806e-02	0.124765465	1.004025223	-0.403105803	0.038066645
223	4.008062e-03	0.208647486	1.029458615	-0.418075669	0.037697432
224	-1.414555e-02	0.208647486	0.953564378	-0.386319385	0.038436372
225	2.223838e-02	0.041977601	0.543390250	-0.235893849	0.030761337
226	-1.138027e-02	-0.411468371	-3.227383523	1.330734551	-0.164458075
227	1.209324e-02	0.124765465	1.013698814	-0.425426818	0.018480433
228	2.445165e-02	0.208647486	1.117211257	-0.440695060	0.026994357
229	2.467521e-02	0.124765465	0.492708804	-0.252723044	0.032059933
230	1.894884e-02	0.041977601	-0.200059594	0.134637697	0.038815264
231	2.429347e-02	-0.030603159	-0.258360903	0.112758874	0.022603200
232	-1.571934e-02	-0.030603159	0.013198521	-0.045406032	0.034848550
233	2.429347e-02	0.041977601	-0.041111028	-0.019668762	-0.041147628
234	-4.823049e-03	0.124765465	0.597666972	-0.219914830	0.036471998
235	2.402922e-02	-0.030603159	0.399141991	-0.183720915	0.028221889
236	1.379837e-03	0.124765465	0.925339471	-0.379792654	0.028221889
237	2.445165e-02	0.083010563	0.160791816	0.053890466	0.039405898
238	-1.178424e-04	0.008490398	0.695743223	-0.296635918	0.036484554
239	3.370612e-03	-0.030603159	-0.248466293	0.136527868	0.037943219
240	-1.414555e-02	0.124765465	0.905873007	-0.375064056	0.038066645
241	-5.048623e-02	0.247444332	1.364914993	-0.512927632	0.018480433
242	-1.571934e-02	0.008490398	0.942138450	-0.380300460	0.032059933
243	-1.033732e-02	0.041977601	0.800850188	-0.356781829	0.036192957
244	-4.690694e-02	-0.370397187	-0.724399140	0.334009460	0.007442424
245	2.429347e-02	0.008490398	-0.096265001	0.096996290	0.021561479
246	4.599152e-03	0.166146535	0.662464218	-0.284563081	0.025753655
247	2.668302e-05	0.083010563	0.582464322	-0.257250085	0.038514293
248	-2.475302e-02	-0.094781204	-0.737649445	0.337492826	0.024314995
249	-3.069531e-02	-0.453588405	-3.030788110	1.205209568	-0.138548445
250	3.626091e-03	0.124765465	0.683973137	-0.286018109	0.037650270
251	1.557976e-02	0.008490398	-0.179593267	0.054713190	-0.020588727
252	1.758806e-02	0.208647486	0.748797926	-0.318834585	0.018480433
253	2.263388e-03	0.041977601	-0.022205735	0.039284657	0.019214929
254	6.917445e-03	0.008490398	0.209691573	-0.123449324	0.034082278
255	4.830654e-03	0.008490398	0.462247618	-0.172763642	0.024507885
256	-3.530530e-02	0.083010563	-0.047603920	0.215730012	0.036484554
257	4.599152e-03	0.247444332	1.167401513	-0.444352839	0.030761337

258	2.177627e-02	0.247444332	1.073626930	-0.410802974	0.038066645
259	6.917445e-03	0.083010563	-0.009379522	0.084699835	0.036484554
260	-2.167584e-02	-0.173835279	-1.492677294	0.587806243	0.033603197
261	2.445165e-02	0.041977601	0.500909702	-0.230757962	0.025753655
262	-2.255876e-03	-0.030603159	-0.267337525	0.124169511	-0.009059418
263	2.429147e-03	-0.134583059	-1.173148699	0.550452423	0.039023120
	CRuns	CRBI	CWalks	PutOuts	Assists
1	-0.056533712	0.1394182093	-0.0343016384	0.0309149383	-0.0129975445
2	-0.243628827	-0.0789799070	-0.0248318676	0.0456294033	-0.0062934119
3	0.820408987	0.6720895848	-0.0322943182	-0.0148803049	-0.0177722164
4	-0.554852802	-0.3830969185	0.0676390853	0.0414003650	-0.0138425860
5	0.264314218	0.0256366672	-0.0173202448	0.0028030770	0.0651533525
6	-0.586645315	-0.4258799326	0.0736664815	-0.0170250685	0.0007077363
7	-0.567313207	-0.3935035976	0.0817322377	-0.0182433220	0.0373444210
8	-0.583155077	-0.3969724906	0.0844233929	-0.0215361223	0.0387550190
9	0.745683407	0.7368803384	-0.0795668287	-0.0137215951	-0.0361560011
10	0.605948205	0.2559335905	-0.0447190855	-0.0042122727	0.0699896884
11	-0.300813713	-0.2026940347	-0.0018055726	0.0114200589	-0.0123641566
12	-0.277132195	-0.1734950311	-0.0170916339	-0.0118580108	-0.0177722164
13	-0.079836305	-0.3150117697	-0.0173197723	-0.0182433220	0.0081575071
14	0.046302143	-0.0424798923	-0.0224437690	-0.0171586637	-0.0123641566
15	1.185729010	0.8652158695	-0.0672133959	-0.0182413881	0.0387550190
16	-0.524454370	-0.4096917651	0.0636639639	-0.0181100635	0.0200396197
17	-0.520937344	-0.3414703977	0.0523139747	-0.0144370831	-0.0195873322
18	-0.512319049	-0.3807843232	0.0461889184	0.0030043946	-0.0203618336
19	-0.542369456	-0.3865658116	0.0482087346	0.0143397454	-0.0195873322
20	-0.213045210	-0.1028576996	-0.0226997508	0.0238491950	-0.0120020303
21	1.123895284	0.9636479760	-0.0367907629	0.0557873164	0.0116763986
22	0.161565912	-0.1831171544	-0.0269730571	0.0187404059	-0.0203618336
23	-0.118012210	-0.3081835462	-0.0129514510	-0.0107313439	-0.0315459618
24	-0.206302843	0.0123852839	-0.0035446076	0.0370445278	-0.0056711798
25	-0.003356742	-0.2096429814	-0.0259298699	0.0044123970	0.0466140648
26	0.709931159	0.5425080776	-0.0720072653	0.0045237727	-0.0284726023
27	-0.498962596	-0.3830969185	0.0689772177	-0.0094891648	-0.0252483532
28	-0.252513290	-0.1678503608	0.0077124172	-0.0182415762	0.0391580470
29	-0.420526420	-0.2782179474	0.0456885719	0.0178262150	-0.0123952311
30	0.872907326	0.6284804237	-0.0523708386	-0.0168877277	0.0172631541
31	-0.579660954	-0.4027539790	0.0776960629	0.0192230659	-0.0121126317
32	-0.604060528	-0.4027539790	0.0597098399	0.0125355568	-0.0154317134
33	-0.489340395	-0.3484079882	0.0683086885	0.0119783573	-0.0175339457
34	-0.451892923	-0.2966885227	0.0175708826	0.0142247773	-0.0148583679
35	-0.443120048	-0.2918982269	0.0382664048	-0.0169229708	0.0200396197
36	-0.435917268	-0.3092088871	0.0557218506	-0.0163912180	-0.0300092821
37	0.002218914	0.0338547508	-0.0244785671	0.0109146961	-0.0203618336
38	1.115511858	0.8452802530	-0.0567959488	0.0160007282	-0.0139557529

39	-0.583155077	-0.3992850860	0.0716535926	-0.0182415762	-0.0252483532
40	0.490366971	0.3294461763	-0.0272105283	-0.0167161287	0.0065205052
41	0.682606990	0.4577817075	-0.0482222977	0.0125057227	-0.0269359226
42	-0.468098871	-0.2702589001	0.0468582256	-0.0215936069	-0.0178325091
43	-0.352856654	-0.2148628956	-0.0173202448	-0.0212726537	-0.0217687652
44	0.103719328	0.0036688863	-0.0061395474	-0.0182713834	0.0225798503
45	0.312136678	0.2160623576	-0.0263799113	-0.0034289422	0.0774457063
46	-0.536989810	-0.3565020720	0.0790410265	-0.0142188496	-0.0098011334
47	0.599108730	0.4515518274	-0.0713619367	-0.0161990651	-0.0046246990
48	-0.437810181	-0.3622835603	0.0516340564	-0.0188182918	0.0220138071
49	-0.434139591	-0.3565020720	0.0189110839	-0.0169229708	0.0088060493
50	1.343365226	1.0969674112	-0.0667524469	-0.0137215951	-0.0361560011
51	-0.538784562	-0.3900347046	0.0636639639	-0.0223562190	-0.0315459618
52	-0.468098871	-0.3150117697	0.0394991333	-0.0183134071	0.0290823471
53	1.026573149	0.7605538830	-0.0633414244	-0.0225708512	0.0252535812
54	0.622973914	0.6434321361	-0.0502504733	-0.0181924139	0.0240357476
55	1.397861603	1.0633260584	-0.1269523842	0.0415494633	-0.0018473561
56	1.247449517	0.8103929242	-0.0909061737	0.0030043946	-0.0178325091
57	0.194943509	-0.0253914158	0.0196212220	-0.0101881896	0.0379489630
58	-0.293418260	-0.3056546426	0.0177676641	-0.0094891648	-0.0252483532
59	-0.130961440	-0.0672085010	-0.0155162519	-0.0193354007	-0.0203618336
60	-0.425737731	-0.3081835462	0.0529902759	-0.0181990048	0.0235557974
61	1.142304747	0.3855150977	-0.0753260980	-0.0161188493	-0.0122901198
62	-0.003356742	0.1202413853	-0.0068364762	0.0718234010	-0.0029552602
63	0.794972011	0.6521539683	-0.0566115693	0.0109146961	-0.0269359226
64	0.390266758	0.2858370153	-0.0582709856	0.0028000428	-0.0269359226
65	1.073549875	0.9898134726	-0.0453644140	0.0029231409	-0.0203618336
66	-0.531608919	-0.3553457743	0.0475295161	-0.0220126239	-0.0300092821
67	0.680897503	0.6309723758	-0.0803965368	-0.0208793111	-0.0203618336
68	-0.359895047	-0.2894748843	0.0154010508	-0.0002802729	0.0587049046
69	-0.367124638	-0.2444123084	0.0407095148	0.0247723793	-0.0138425860
70	-0.116082904	0.0355147587	-0.0247500564	-0.0094891648	-0.0178325091
71	-0.577912763	-0.3958161930	0.0683086885	-0.0158606249	-0.0002971981
72	-0.487726971	-0.3056546426	0.0430977973	-0.0222711330	-0.0252483532
73	-0.126721164	-0.0360897201	-0.0195495428	-0.0164273026	0.0112095376
74	1.333748219	1.1654960929	-0.0726525939	0.0070900603	-0.0203618336
75	-0.367124638	-0.2942202405	0.0250061015	0.0033335125	-0.0330826416
76	-0.030004956	-0.2233347807	-0.0247871711	0.0070900603	-0.0269359226
77	0.915229426	0.8926273422	-0.0650930306	0.0546081830	-0.0046246990
78	-0.349423886	-0.2906290893	0.0215624313	-0.0181100635	0.0020484949
79	0.675759395	0.4914230603	-0.0246461365	0.0125057227	0.0687806045
80	-0.104942542	0.0007306647	0.0177676641	0.0043394449	-0.0230669407
81	-0.605801958	-0.4154732535	0.0824050265	-0.0177618573	-0.0284726023
82	1.230764588	0.9362365033	-0.0638023734	-0.0178424803	0.0242460112
83	-0.295178121	-0.1516665091	-0.0178707526	0.0366699626	-0.0046039027

84	0.852604333	0.8726917257	-0.0624195265	0.0450026378	-0.0118700544
85	-0.381442873	-0.2247247393	0.0272379595	0.0654425785	-0.0017184927
86	0.019112211	0.1202413853	-0.0193515762	-0.0180698627	0.0476216348
87	-0.462713811	-0.3437827975	0.0563998685	-0.0089660887	0.0562867367
88	0.967634121	0.9574180958	-0.0500660937	-0.0218063816	-0.0269359226
89	0.138358035	0.0678146295	-0.0375282813	0.0028030770	0.0784532763
90	-0.257996772	-0.1678503608	0.0285526852	-0.0175524151	0.0211230957
91	1.227416520	0.8178687804	-0.0846372675	-0.0206025361	-0.0284726023
92	1.393053099	1.2066133019	-0.0971750799	-0.0172603559	0.0182614847
93	-0.204510196	-0.2859501116	-0.0171495034	0.0204274731	-0.0203618336
94	-0.133052848	-0.2663700287	-0.0185683362	-0.0189233865	-0.0228691175
95	0.607667771	0.2746232310	-0.0248736923	-0.0128394581	0.0524579707
96	-0.266609594	-0.0583746199	0.0067736986	0.0332526427	-0.0117543166
97	0.165173498	0.1464039510	-0.0226997508	-0.0049375102	-0.0228691175
98	-0.172033690	-0.0034266838	0.0085392705	0.0127440723	-0.0209775287
99	0.248905833	0.3618415531	-0.0248318676	0.0080645780	-0.0227199856
100	-0.071825921	0.0849786277	-0.0157318460	-0.0177618573	0.0250520672
101	-0.386877350	-0.2506548612	0.0120040131	-0.0160775447	0.0030940183
102	1.001340148	0.9835835924	-0.0590085040	-0.0137215951	-0.0361560011
103	-0.512319049	-0.4004413837	0.0577366737	0.0029231409	0.0639442685
104	-0.498962596	-0.3228497398	0.0488902882	-0.0207744094	-0.0227199856
105	-0.536989810	-0.3935035976	0.0584037041	-0.0178424803	-0.0330826416
106	0.037258623	0.0836786107	-0.0224437690	0.0147278067	-0.0209775287
107	0.400446000	0.1489853020	-0.0284768244	-0.0118580108	-0.0116671377
108	-0.520937344	-0.3992850860	0.0430977973	0.0028000428	-0.0252483532
109	-0.464389563	-0.2808303593	0.0441707629	0.0126884260	-0.0300092821
110	-0.268301794	-0.1471332585	0.0447343507	-0.0030554701	-0.0228691175
111	0.605948205	0.5063747727	-0.0573490876	0.0303579162	-0.0139731685
112	1.076915264	0.9138089347	-0.0784605511	-0.0049375102	-0.0284726023
113	-0.156149827	0.0939996736	-0.0195367387	0.0459413221	-0.0020942184
114	-0.089996267	-0.0760389244	-0.0243400331	-0.0153196619	-0.0315459618
115	-0.039584153	0.0114744377	-0.0012435072	-0.0079287884	0.0556821947
116	0.175792813	0.0706322558	-0.0228934485	0.0114200589	0.0502413168
117	0.337639235	0.2036025972	-0.0505270427	-0.0137215951	-0.0361560011
118	-0.560191290	-0.3911910023	0.0663086272	-0.0150831615	-0.0116671377
119	-0.581406723	-0.3923472999	0.0597098399	-0.0181100635	-0.0300092821
120	0.052037728	0.1588651884	-0.0188987272	-0.0223313517	-0.0300092821
121	-0.094187288	0.0475457204	-0.0093423479	-0.0175983550	0.0321050571
122	-0.484501861	-0.3807843232	0.0536712205	-0.0118580108	-0.0203618336
123	0.459817424	0.2783611591	-0.0399252160	-0.0215936069	-0.0315459618
124	-0.321329216	-0.1396504509	0.0370726177	-0.0181765749	0.0423822709
125	0.028356992	0.0268033325	-0.0183117710	0.0030043946	0.0768411643
126	-0.607543389	-0.4247236349	0.0776960629	0.0127370825	-0.0217884121
127	1.284060346	1.2340247746	-0.0517255100	0.0127082067	-0.0233490709
128	0.293401031	0.0084635821	-0.0349469670	-0.0173967117	0.0164966823

129	-0.519227922	-0.3263915025	0.0529902759	0.0226188634	-0.0139557529
130	-0.077645463	-0.1410226012	0.0300008274	0.0060868286	0.0689821185
131	-0.308192454	-0.2742293132	0.0475295161	-0.0107313439	-0.0284726023
132	-0.572633668	-0.3830969185	0.0709827652	-0.0091238905	-0.0227199856
133	0.395355742	0.3493817928	-0.0591006938	0.0342204587	-0.0123952311
134	-0.473190388	-0.3530331789	0.0300008274	0.0010747388	0.0697881744
135	0.121163734	0.0923248001	-0.0251582785	-0.0160365748	-0.0330826416
136	-0.252513290	-0.1878612527	0.0370726177	0.0109146961	-0.0188859749
137	-0.579660954	-0.4096917651	0.0750089963	-0.0174328271	-0.0361560011
138	0.145417398	0.1474873802	-0.0258933347	-0.0181484274	-0.0330826416
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[49,]	-0.89669275	-0.57538194	-0.906193582	1	-0.125735318	-0.89820711
[50,]	-0.83363167	0.82235276	-0.894403400	1	0.116476922	-0.87940720
[51,]	-0.87940092	-1.20283119	-0.894403400	1	0.154041471	-0.87940720
[52,]	-0.93308271	-1.18132070	-0.882627400	1	0.202716709	-0.87327491
[53,]	-0.88856580	-0.78482549	-0.882627400	1	0.310402383	-0.87327491
[54,]	-0.80834863	0.67707206	-0.882627400	1	0.046834551	-0.87327491
[55,]	-0.99288176	-0.17474636	-0.870863955	1	0.185470095	-0.85697275
[56,]	-0.88107233	0.89814960	-0.870863955	1	0.004825243	-0.85697275
[57,]	-0.91270880	0.77044719	-0.859122400	1	-0.046540587	-0.84390337
[58,]	-0.73164591	-0.60936134	-0.859122400	1	-0.129164731	-0.84390337
[59,]	-0.84712434	-0.48467859	-0.842766965	1	0.021475634	-0.83534744
[60,]	-0.71294424	-0.38601028	-0.835785136	1	-0.190698142	-0.81713671
[61,]	-0.84108363	-0.11758488	-0.835785136	1	-0.063099842	-0.81713671
[62,]	-0.72061760	3.16754940	-0.835785136	1	-0.032184489	-0.81713671
[63,]	-0.84715267	2.84609093	-0.835785136	1	0.128868643	-0.81713671
[64,]	-0.74421496	0.34486727	-0.824037197	1	-0.182963554	-0.80933989
[65,]	-0.96762884	1.36938798	-0.812240685	1	-0.233500148	-0.81372697
[66,]	-0.79795500	-0.94909644	-0.800344604	1	-0.018015327	-0.81111224
[67,]	-0.68069366	-0.61464873	-0.800344604	1	0.001913162	-0.81111224
[68,]	-0.81509472	-0.14512032	-0.797841942	1	0.019671010	-0.79365265
[69,]	-0.69393993	-0.16459872	-0.788188793	1	-0.057061218	-0.78912437
[70,]	-1.13632497	1.60625926	-0.776375347	1	-0.087450350	-0.76807690
[71,]	-0.73545391	-1.08356095	-0.776375347	1	0.022991711	-0.76807690
[72,]	-0.91109499	-0.97409097	-0.776375347	1	0.088015845	-0.76807690
[73,]	-0.75780803	0.07989194	-0.776375347	1	0.070485626	-0.76807690
[74,]	-0.63998148	2.98166296	-0.770286012	1	-0.089130336	-0.75521321
[75,]	-0.60936134	-0.44579260	-0.751639866	1	-0.073165414	-0.73190050
[76,]	-0.80536198	-0.19939069	-0.751639866	1	0.107230169	-0.73190050
[77,]	-0.66538871	4.22909214	-0.738889769	1	-0.056439361	-0.72096822
[78,]	-0.50055234	-0.38644983	-0.738889769	1	0.038791036	-0.72096822
[79,]	-0.76390959	0.19945130	-0.738889769	1	0.307147817	-0.72096822
[80,]	-0.78319063	1.37892613	-0.713190395	1	0.043297195	-0.67041002
[81,]	-0.57538194	-1.11106070	-0.713190395	1	0.050491461	-0.67041002
[82,]	-0.59613750	2.60778599	-0.700435896	1	-0.488767383	-0.66830821

[83,]	-0.77952842	-0.24452846	-0.687430265	1	-0.080092113	-0.65455059
[84,]	-0.88064532	2.87977735	-0.674363482	1	0.149871895	-0.66000915
[85,]	-0.66589474	-0.66538871	-0.674363482	1	-0.060774514	-0.66000915
[86,]	-0.62017158	0.84849930	-0.661194134	1	-0.017198762	-0.66692592
[87,]	-0.49888001	-0.93308271	-0.654563626	1	0.069679323	-0.65962840
[88,]	-0.57646464	0.50198446	-0.648135099	1	-0.114129585	-0.65767947
[89,]	-0.70152313	0.06817577	-0.648135099	1	-0.057452036	-0.65767947
[90,]	-0.48471456	-0.36368483	-0.648135099	1	-0.013345666	-0.65767947
[91,]	-0.86061276	0.65920225	-0.648135099	1	-0.193841263	-0.65767947
[92,]	-0.59519561	-1.13632497	-0.648135099	1	0.373962900	-0.65767947
[93,]	-0.78260476	-0.40376999	-0.648135099	1	0.112986157	-0.65767947
[94,]	-0.61464873	-0.21133244	-0.622688391	1	-0.079451388	-0.62797213
[95,]	-0.49187835	0.54883313	-0.610233183	1	-0.073176979	-0.62056348
[96,]	-1.14185889	0.19719384	-0.585487977	1	-0.267335587	-0.60107525
[97,]	-0.67238188	0.46908272	-0.585487977	1	-0.307179004	-0.60107525
[98,]	-0.38601028	0.24845890	-0.585487977	1	0.053768582	-0.60107525
[99,]	-0.69854465	1.11465345	-0.579276986	1	-0.175823773	-0.59990329
[100,]	-0.36548431	0.64544581	-0.579276986	1	-0.138846687	-0.59990329
[101,]	-0.50082013	-0.38203158	-0.557035440	1	-0.142674338	-0.55747164
[102,]	-0.38203158	-0.26271839	-0.531413199	1	-0.200484566	-0.56375692
[103,]	-0.62805386	-1.16654387	-0.525451019	1	0.147236934	-0.51280814
[104,]	-0.44579260	-0.84108363	-0.525451019	1	0.022369075	-0.51280814
[105,]	-0.46191569	-1.13623630	-0.525451019	1	0.122828785	-0.51280814
[106,]	-0.67654195	1.50884303	-0.525451019	1	0.047507514	-0.51280814
[107,]	-0.52358812	-0.27646167	-0.525451019	1	0.051809406	-0.51280814
[108,]	-0.39395854	-1.08743946	-0.513741669	1	0.097362697	-0.50161544
[109,]	-0.78482549	-0.91270880	-0.479048453	1	0.071826960	-0.46738041
[110,]	-0.48467859	-0.70152313	-0.467383336	1	0.063981406	-0.45524197
[111,]	-0.26271839	2.02933599	-0.467383336	1	-0.338904881	-0.45524197
[112,]	-0.55071762	0.57424508	-0.463428504	1	-0.015279425	-0.45869898
[113,]	-0.30889708	0.94695265	-0.432203559	1	0.117311955	-0.42435477
[114,]	-0.32786078	-0.67238188	-0.428328452	1	0.095673458	-0.42186050
[115,]	-0.45753219	0.76702681	-0.428328452	1	-0.204502659	-0.42186050
[116,]	-0.39685458	0.64398184	-0.408419085	1	0.079924771	-0.39651402
[117,]	-0.30555455	-0.40361134	-0.408419085	1	0.032430966	-0.39651402
[118,]	-0.45679495	-0.91831438	-0.408419085	1	-0.083331118	-0.39651402
[119,]	-0.36368483	-0.80428544	-0.378576421	1	-0.162826325	-0.40865015
[120,]	-0.40361134	-1.08178221	-0.372583293	1	0.091705442	-0.40085280
[121,]	-0.42329295	-0.69854465	-0.372583293	1	0.127838178	-0.40085280
[122,]	-0.38644983	-1.31120307	-0.348567882	1	0.274202381	-0.41174040
[123,]	-0.44059756	0.28289906	-0.325044646	1	-0.120995346	-0.40636537
[124,]	-0.24452846	-0.75780803	-0.325044646	1	-0.004554041	-0.40636537
[125,]	-0.21133244	0.46157033	-0.290458594	1	-0.171732663	-0.37181373
[126,]	-0.85204371	-1.10750240	-0.290458594	1	0.058712675	-0.37181373
[127,]	-0.48957631	4.03955578	-0.290458594	1	0.031506944	-0.37181373

Homework4

[128,]	-0.40376999	-0.78260476	-0.290458594	1	0.145063029	-0.37181373
[129,]	-0.35288921	-0.80834863	-0.256648235	1	-0.055054764	-0.31696188
[130,]	-0.44978470	0.32913420	-0.252516956	1	-0.077624527	-0.30927983
[131,]	-0.16628846	-0.62805386	-0.244861994	1	0.109095848	-0.28913186
[132,]	-0.22439316	-1.06146657	-0.233519323	1	0.094354807	-0.28514891
[133,]	-0.21685725	0.21768420	-0.233519323	1	0.452573565	-0.28514891
[134,]	-0.24942960	-0.69393993	-0.233519323	1	-0.079661420	-0.28514891
[135,]	-0.27646167	-0.07563251	-0.222388694	1	-0.105052216	-0.24340539
[136,]	-0.16459872	0.13655393	-0.219304893	1	0.092403499	-0.23671463
[137,]	-0.11758488	-0.95259366	-0.176991896	1	-0.069074158	-0.17182327
[138,]	-0.07563251	1.70156067	-0.176991896	1	-0.011129563	-0.17182327
[139,]	-0.21176920	1.18798925	-0.176991896	1	-0.141631696	-0.17182327
[140,]	-0.17075265	2.93263621	-0.176991896	1	-0.171483603	-0.17182327
[141,]	-0.17848126	1.88591396	-0.176991896	1	-0.174004538	-0.17182327
[142,]	-0.13364317	0.62778573	-0.120374994	1	-0.152129584	-0.07714638
[143,]	-0.32748409	0.18890943	-0.120374994	1	0.029062166	-0.07714638
[144,]	-0.14512032	-0.90655147	-0.120374994	1	-0.025797042	-0.07714638
[145,]	0.09922677	1.07973542	-0.109006614	1	0.059742809	-0.06273899
[146,]	0.05667061	0.31281671	-0.092113245	1	0.132642178	-0.04430683
[147,]	-0.19939069	-0.67654195	-0.0864448467	1	0.157583934	-0.05468331
[148,]	0.19719384	-0.42329295	-0.063962293	1	0.052112574	-0.02041327
[149,]	-0.11765766	-0.99868830	-0.063962293	1	-0.050101422	-0.02041327
[150,]	0.17492902	1.62490861	-0.063962293	1	-0.184794176	-0.02041327
[151,]	0.17114497	-0.63998148	-0.063962293	1	-0.116548035	-0.02041327
[152,]	-0.09997982	-0.78319063	-0.035203267	1	0.082073368	0.01328150
[153,]	0.01298748	-0.19157862	-0.024353071	1	0.178619289	0.01466317
[154,]	-0.19157862	-0.49187835	-0.005689718	1	-0.108774674	0.02754261
[155,]	0.02210185	0.60066076	-0.005689718	1	-0.011020392	0.02754261
[156,]	0.03697775	0.82058218	0.006310439	1	-0.203972591	0.02331371
[157,]	0.06817577	0.04856200	0.018298237	1	0.084701200	0.03863190
[158,]	-0.17474636	-0.89669275	0.018298237	1	0.010617627	0.03863190
[159,]	0.14340482	-0.16628846	0.053995323	1	-0.080136690	0.04504779
[160,]	0.11971368	-0.97781321	0.053995323	1	-0.070976517	0.04504779
[161,]	0.07253044	0.02011579	0.053995323	1	0.084402541	0.04504779
[162,]	0.10225550	0.53361662	0.077630610	1	0.039785641	0.08630661
[163,]	0.02011579	-1.02204878	0.113229534	1	0.008641268	0.14595207
[164,]	0.27253876	-0.83363167	0.124868995	1	-0.041079634	0.15119759
[165,]	0.04856200	0.38098944	0.142217678	1	0.006865430	0.16295938
[166,]	0.07989194	0.07253044	0.159482937	1	-0.026628973	0.18473778
[167,]	0.28289906	0.24611070	0.171125554	1	0.027949339	0.18632600
[168,]	0.34486727	-1.12783436	0.171125554	1	0.062552905	0.18632600
[169,]	0.03586790	-0.97230598	0.171125554	1	-0.017770786	0.18632600
[170,]	0.46908272	0.31494566	0.171125554	1	0.004352215	0.18632600
[171,]	0.15777367	-0.84715267	0.199728991	1	0.028438108	0.22690461
[172,]	0.18890943	-0.80875450	0.227858695	1	-0.095874785	0.24832625

Homework4

[173,]	0.22370491	3.43944845	0.227858695	1	0.021716820	0.24832625
[174,]	0.13655393	0.72567226	0.238969067	1	0.051913240	0.27959411
[175,]	0.32913420	-0.91452135	0.261769580	1	-0.029451136	0.29881129
[176,]	0.24611070	-0.89716316	0.284569849	1	-0.000445808	0.30953797
[177,]	0.46157033	-0.80536198	0.300521468	1	0.066835915	0.35058326
[178,]	0.24845890	0.72186678	0.313046015	1	-0.105257188	0.33712185
[179,]	0.31494566	-0.66589474	0.330299682	1	0.002710042	0.35126319
[180,]	0.45631176	-0.30555455	0.341897252	1	-0.100616214	0.35545721
[181,]	0.50198446	-0.71294424	0.399461625	1	-0.105770315	0.43864651
[182,]	0.48353567	-0.91109499	0.399461625	1	0.148732912	0.43864651
[183,]	0.38098944	2.58247667	0.399461625	1	0.478032425	0.43864651
[184,]	0.63769875	0.32322836	0.399461625	1	0.064626519	0.43864651
[185,]	0.32322836	0.50918497	0.399461625	1	-0.002585847	0.43864651
[186,]	0.31405887	-0.17848126	0.418474153	1	-0.002203457	0.45848086
[187,]	0.31281671	-0.84712434	0.457552898	1	0.021800164	0.50639097
[188,]	0.65920225	1.78164560	0.477592704	1	-0.177015962	0.51144254
[189,]	0.54883313	0.58133253	0.487956500	1	-0.074733414	0.46695548
[190,]	0.62778573	-0.79795500	0.487956500	1	0.012766547	0.46695548
[191,]	0.48868813	0.27253876	0.494349817	1	-0.156479629	0.45393095
[192,]	0.73175708	-0.86612262	0.494349817	1	-0.054615141	0.45393095
[193,]	0.28135321	-0.17075265	0.494349817	1	-0.009932071	0.45393095
[194,]	0.64544581	-0.46191569	0.519166670	1	-0.057042322	0.45334159
[195,]	0.42686870	-0.86061276	0.519166670	1	0.223071034	0.45334159
[196,]	0.18853940	1.21461495	0.519166670	1	-0.060796229	0.45334159
[197,]	0.19945130	-0.76390959	0.519166670	1	0.037746364	0.45334159
[198,]	0.41534690	-0.85204371	0.519166670	1	0.561259884	0.45334159
[199,]	0.50918497	0.10225550	0.519166670	1	-0.033014047	0.45334159
[200,]	0.58133253	2.45033085	0.519166670	1	0.032720529	0.45334159
[201,]	0.46488941	0.05667061	0.519166670	1	-0.154364919	0.45334159
[202,]	0.51655729	-0.21685725	0.553683247	1	-0.018574115	0.47377019
[203,]	0.57424508	-0.11765766	0.572015741	1	0.047515915	0.53193927
[204,]	0.32708275	-0.59519561	0.575612779	1	-0.042346112	0.53870249
[205,]	0.76702681	-0.48957631	0.575612779	1	0.198792481	0.53870249
[206,]	0.31970638	-0.21176920	0.579272350	1	0.031084476	0.54571418
[207,]	0.53361662	0.41534690	0.586599813	1	0.091252220	0.55054366
[208,]	0.60066076	-1.12027582	0.603004014	1	0.059706586	0.56411124
[209,]	0.72186678	0.66326401	0.630252103	1	0.114321491	0.59684611
[210,]	0.82058218	-0.68069366	0.630252103	1	-0.104494788	0.59684611
[211,]	0.67074224	-0.81509472	0.662781774	1	0.032316059	0.62335577
[212,]	0.21768420	0.73175708	0.684467821	1	-0.249743744	0.66700852
[213,]	0.67707206	-0.57646464	0.738681782	1	-0.061077083	0.72261133
[214,]	0.64398184	-0.79701834	0.738681782	1	-0.100590633	0.72261133
[215,]	1.02370519	-1.09179744	0.738681782	1	0.095951489	0.72261133
[216,]	0.77044719	0.28135321	0.738681782	1	0.200660128	0.72261133
[217,]	0.66326401	-0.82238629	0.792900435	1	-0.075222682	0.81024734

Homework4

[218,]	0.72567226	-0.45753219	0.792900435	1	0.031986811	0.81024734
[219,]	0.86730872	1.15642306	0.792900435	1	-0.110065508	0.81024734
[220,]	0.84470905	-1.24926102	0.792900435	1	0.259184255	0.81024734
[221,]	0.69321371	-1.00380821	0.847129035	1	-0.009599297	0.88714121
[222,]	0.84849930	-0.73545391	0.847129035	1	-0.026908161	0.88714121
[223,]	0.97250844	-0.98341462	0.847129035	1	0.074241250	0.88714121
[224,]	1.31290170	-0.88856580	0.890522380	1	0.025162406	0.92587679
[225,]	1.02989994	-0.13364317	0.901373957	1	0.008193854	0.93510870
[226,]	0.89814960	1.90611124	0.919458115	1	0.105791495	0.96395719
[227,]	0.82886957	-0.87940092	0.933927383	1	0.004689623	0.96672558
[228,]	1.11465345	-1.01070096	0.955630924	1	0.032096959	1.00415982
[229,]	0.82235276	-0.39685458	0.955630924	1	-0.009316190	1.00415982
[230,]	1.01473605	-1.23859247	0.977335428	1	0.225184957	1.03738491
[231,]	1.18798925	0.03697775	1.064159283	1	-0.038091520	1.08251040
[232,]	0.91844922	-0.32786078	1.064159283	1	-0.097684591	1.08251040
[233,]	1.15642306	0.82886957	1.064159283	1	0.088449536	1.08251040
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[162,] 0.4885883 0.10312299 7.345997e-02 0.072287004 0.10053766 0.4936059
[163,] 0.4899474 0.13769750 1.115852e-01 0.110679911 0.10120747 0.4999913
[164,] 0.4903770 0.15061388 1.239388e-01 0.123054787 0.10276955 0.5000000
[165,] 0.4910268 0.16606673 1.402658e-01 0.139470317 0.10089575 0.5000000
[166,] 0.4916652 0.18876867 1.573951e-01 0.156498561 0.10496603 0.5000000
[167,] 0.4923490 0.19725527 1.664928e-01 0.165687771 0.11184340 0.4992171
[168,] 0.4923490 0.19725527 1.664928e-01 0.165687771 0.11184340 0.4992171
[169,] 0.4923490 0.19725527 1.664928e-01 0.165687771 0.11184340 0.4992171
[170,] 0.4923490 0.19725527 1.664928e-01 0.165687771 0.11184340 0.4992171
[171,] 0.4940235 0.22079245 1.941722e-01 0.193631148 0.11995300 0.4932667
[172,] 0.4951664 0.24069075 2.228726e-01 0.222580859 0.11683999 0.4923459
[173,] 0.4951664 0.24069075 2.228726e-01 0.222580859 0.11683999 0.4923459
[174,] 0.4957814 0.25495501 2.341297e-01 0.233832678 0.11449397 0.4914905
[175,] 0.4962050 0.27070652 2.567923e-01 0.256614072 0.11080048 0.4929324
[176,] 0.4966086 0.29294977 2.817278e-01 0.281599480 0.11090213 0.4924389
[177,] 0.4968806 0.30482221 2.980098e-01 0.297938248 0.10665286 0.4946565
[178,] 0.4970913 0.30850392 3.081377e-01 0.308134161 0.10750968 0.4930790
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[179,]	0.4973584	0.33064834	3.267730e-01	0.326738588	0.11070852	0.4966143
[180,]	0.4975695	0.33599496	3.366612e-01	0.336666634	0.11502937	0.4986544
[181,]	0.4983709	0.39516353	3.943448e-01	0.394340291	0.11460694	0.5000000
[182,]	0.4983709	0.39516353	3.943448e-01	0.394340291	0.11460694	0.5000000
[183,]	0.4983709	0.39516353	3.943448e-01	0.394340291	0.11460694	0.5000000
[184,]	0.4983709	0.39516353	3.943448e-01	0.394340291	0.11460694	0.5000000
[185,]	0.4983709	0.39516353	3.943448e-01	0.394340291	0.11460694	0.5000000
[186,]	0.4985767	0.40861633	4.148702e-01	0.414899975	0.12084382	0.5000000
[187,]	0.4989557	0.44004530	4.541569e-01	0.454206188	0.12277740	0.5000000
[188,]	0.4991110	0.45501251	4.726730e-01	0.472725485	0.12324261	0.5000000
[189,]	0.4991355	0.47511574	4.827324e-01	0.482754374	0.12717251	0.5000000
[190,]	0.4991355	0.47511574	4.827324e-01	0.482754374	0.12717251	0.5000000
[191,]	0.4989790	0.48060062	4.868203e-01	0.486841494	0.12302364	0.5000000
[192,]	0.4989790	0.48060062	4.868203e-01	0.486841494	0.12302364	0.5000000
[193,]	0.4989790	0.48060062	4.868203e-01	0.486841494	0.12302364	0.5000000
[194,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[195,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[196,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[197,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[198,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[199,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[200,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[201,]	0.4988551	0.50625955	5.161992e-01	0.516237306	0.11817742	0.5000000
[202,]	0.4993565	0.54518122	5.501062e-01	0.550116746	0.12262415	0.5000000
[203,]	0.4995719	0.56384240	5.681818e-01	0.568188019	0.12534790	0.5000000
[204,]	0.4997776	0.56435652	5.717976e-01	0.571803141	0.12404879	0.5000000
[205,]	0.4997776	0.56435652	5.717976e-01	0.571803141	0.12404879	0.5000000
[206,]	0.4999601	0.56860625	5.754174e-01	0.575418263	0.12823699	0.5000000
[207,]	0.5000000	0.57279130	5.826463e-01	0.582646338	0.12836918	0.5000000
[208,]	0.5000000	0.58648338	5.989111e-01	0.598911133	0.12883801	0.5000000
[209,]	0.5000000	0.61377322	6.260191e-01	0.626019126	0.13178147	0.5000000
[210,]	0.5000000	0.61377322	6.260191e-01	0.626019126	0.13178147	0.5000000
[211,]	0.5000000	0.64250829	6.585487e-01	0.658548718	0.12921506	0.5000000
[212,]	0.5000000	0.66799902	6.802351e-01	0.680235112	0.12987072	0.5000000
[213,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[214,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[215,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[216,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[217,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[218,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[219,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[220,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[221,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000
[222,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000
[223,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000

[224,]	0.4992723	0.89628538	8.862802e-01	0.886255857	0.11423595	0.5000000
[225,]	0.4992033	0.90865312	8.971297e-01	0.897099054	0.11464206	0.5000000
[226,]	0.4990901	0.92954239	9.152139e-01	0.915170327	0.11906339	0.5000000
[227,]	0.4990155	0.94314695	9.296730e-01	0.929628646	0.12064491	0.5000000
[228,]	0.4989350	0.96773010	9.513733e-01	0.951315040	0.12374608	0.5000000
[229,]	0.4989350	0.96773010	9.513733e-01	0.951315040	0.12374608	0.5000000
[230,]	0.4988594	0.99122925	9.730707e-01	0.973001434	0.12847828	0.5000000
[231,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[232,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[233,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[234,]	0.4979856	1.11120247	1.078042e+00	1.077818284	0.12225422	0.5000000
[235,]	0.4970791	1.18253631	1.150423e+00	1.150107710	0.12726471	0.5000000
[236,]	0.4971793	1.18487688	1.154014e+00	1.153720663	0.12836245	0.5000000
[237,]	0.4971209	1.19445865	1.168431e+00	1.168178982	0.12736025	0.5000000
[238,]	0.4954442	1.30011184	1.276968e+00	1.276610954	0.12792537	0.5000000
[239,]	0.4937675	1.40576502	1.385473e+00	1.385042925	0.12849048	0.4989320
[240,]	0.4929291	1.45859161	1.439715e+00	1.439258911	0.12877304	0.4977482
[241,]	0.4926496	1.47619977	1.457793e+00	1.457330183	0.12886722	0.4973556
[242,]	0.4920907	1.51141820	1.493948e+00	1.493474896	0.12905560	0.4965732
[243,]	0.4914200	1.55367947	1.537329e+00	1.536847685	0.12928164	0.4956397
[244,]	0.4908332	1.59065808	1.575283e+00	1.574798875	0.12947943	0.4948274
[245,]	0.4900786	1.63820201	1.624076e+00	1.623593262	0.12973374	0.4937892
[246,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[247,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[248,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[249,]	0.4884019	1.74385519	1.732483e+00	1.732025233	0.13029885	0.4915071
[250,]	0.4870605	1.82837774	1.819185e+00	1.818770810	0.13075094	0.4897058
[251,]	0.4837070	2.03968410	2.035855e+00	2.035634752	0.13188117	0.4852946
[252,]	0.4820303	2.14533728	2.144143e+00	2.144066724	0.13244629	0.4831371
[253,]	0.4786768	2.35664364	2.360626e+00	2.360930666	0.13357652	0.4789153
[254,]	0.4763293	2.50455810	2.512090e+00	2.512735426	0.13436768	0.4760317
[255,]	0.4719698	2.77925637	2.793219e+00	2.794658551	0.13583698	0.4708272
[256,]	0.4699088	2.90912526	2.926056e+00	2.927943130	0.13653162	0.4684326
[257,]	0.4686163	2.99056273	3.009330e+00	3.011522494	0.13696721	0.4669520
[258,]	0.4677588	3.04459588	3.064571e+00	3.066976772	0.13725622	0.4659784
[259,]	0.4672749	3.07508527	3.095739e+00	3.098268071	0.13741930	0.4654320
[260,]	0.4661012	3.14904250	3.171331e+00	3.174170451	0.13781488	0.4641159
[261,]	0.4609928	3.47093182	3.500158e+00	3.504525800	0.13953659	0.4585335
[262,]	0.4514297	4.07350783	4.114945e+00	4.122950199	0.14275963	0.4486848
[263,]	0.4498368	4.17387835	4.217252e+00	4.225960572	0.14329649	0.4471160

R-square value

In [116...]

```
R"mod$rsq"
```

Out[116...]
 RObject{RealSxp}
 [1] 0.9798552

ACE improve the R-square value from the previous experiments.

In [117...]
 R"mod"

Out[117...]
 RObject{VecSxp}
 \$p
 [1] 17
 \$n
 [1] 263
 \$x

	1	2	3	4	5	6
AtBat	315.00000	479.00000	496.00000	321.00000	594.00000	185.00000
Hits	81.00000	130.00000	141.00000	87.00000	169.00000	37.00000
HmRun	7.00000	18.00000	20.00000	10.00000	4.00000	1.00000
Runs	24.00000	66.00000	65.00000	39.00000	74.00000	23.00000
RBI	38.00000	72.00000	78.00000	42.00000	51.00000	8.00000
Walks	39.00000	76.00000	37.00000	30.00000	35.00000	21.00000
Years	14.00000	3.00000	11.00000	2.00000	11.00000	2.00000
CAtBat	3449.00000	1624.00000	5628.00000	396.00000	4408.00000	214.00000
CHits	835.00000	457.00000	1575.00000	101.00000	1133.00000	42.00000
CHmRun	69.00000	63.00000	225.00000	12.00000	19.00000	1.00000
CRuns	321.00000	224.00000	828.00000	48.00000	501.00000	30.00000
CRBI	414.00000	266.00000	838.00000	46.00000	336.00000	9.00000
CWalks	375.00000	263.00000	354.00000	33.00000	194.00000	24.00000
PutOuts	632.00000	880.00000	200.00000	805.00000	282.00000	76.00000
Assists	43.00000	82.00000	11.00000	40.00000	421.00000	127.00000
Errors	10.00000	14.00000	3.00000	4.00000	25.00000	7.00000
bSalary	8.660888	8.680873	8.758991	5.775464	9.553321	5.351515
	7	8	9	10	11	12
AtBat	298.00000	323.00000	401.00000	574.00000	202.00000	418.00000
Hits	73.00000	81.00000	92.00000	159.00000	53.00000	113.00000
HmRun	0.00000	6.00000	17.00000	21.00000	4.00000	13.00000
Runs	24.00000	26.00000	49.00000	107.00000	31.00000	48.00000
RBI	24.00000	32.00000	66.00000	75.00000	26.00000	61.00000
Walks	7.00000	8.00000	65.00000	59.00000	27.00000	47.00000
Years	3.00000	2.00000	13.00000	10.00000	9.00000	4.00000
CAtBat	509.00000	341.00000	5206.00000	4631.00000	1876.00000	1512.00000

Homework4

CHits	108.000000	86.000000	1332.000000	1300.000000	467.000000	392.000000
CHmRun	0.000000	6.000000	253.000000	90.000000	15.000000	41.000000
CRuns	41.000000	32.000000	784.000000	702.000000	192.000000	205.000000
CRBI	37.000000	34.000000	890.000000	504.000000	186.000000	204.000000
CWalks	12.000000	8.000000	866.000000	488.000000	161.000000	203.000000
PutOuts	121.000000	143.000000	0.000000	238.000000	304.000000	211.000000
Assists	283.000000	290.000000	0.000000	445.000000	45.000000	11.000000
Errors	9.000000	19.000000	0.000000	22.000000	11.000000	7.000000
bSalary	5.918716	5.459584	10.33526	8.823755	8.806407	8.942687
	13	14	15	16	17	18
AtBat	239.000000	196.000000	568.000000	190.000000	127.000000	413.000000
Hits	60.000000	43.000000	158.000000	46.000000	32.000000	92.000000
HmRun	0.000000	7.000000	20.000000	2.000000	8.000000	16.000000
Runs	30.000000	29.000000	89.000000	24.000000	16.000000	72.000000
RBI	11.000000	27.000000	75.000000	8.000000	22.000000	48.000000
Walks	22.000000	30.000000	73.000000	15.000000	14.000000	65.000000
Years	6.000000	13.000000	15.000000	5.000000	8.000000	1.000000
CAtBat	1941.000000	3231.000000	8068.000000	479.000000	727.000000	413.000000
CHits	510.000000	825.000000	2273.000000	102.000000	180.000000	92.000000
CHmRun	4.000000	36.000000	177.000000	5.000000	24.000000	16.000000
CRuns	309.000000	376.000000	1045.000000	65.000000	67.000000	72.000000
CRBI	103.000000	290.000000	993.000000	23.000000	82.000000	48.000000
CWalks	207.000000	238.000000	732.000000	39.000000	56.000000	65.000000
PutOuts	121.000000	80.000000	105.000000	102.000000	202.000000	280.000000
Assists	151.000000	45.000000	290.000000	177.000000	22.000000	9.000000
Errors	6.000000	8.000000	10.000000	16.000000	2.000000	5.000000
bSalary	9.415767	7.404191	9.619046	6.852483	6.412654	5.918716
	19	20	21	22	23	24
AtBat	426.000000	472.000000	629.000000	587.000000	324.000000	474.000000
Hits	109.000000	116.000000	168.000000	163.000000	73.000000	129.000000
HmRun	3.000000	16.000000	18.000000	4.000000	4.000000	10.000000
Runs	55.000000	60.000000	73.000000	92.000000	32.000000	50.000000
RBI	43.000000	62.000000	102.000000	51.000000	18.000000	56.000000
Walks	62.000000	74.000000	40.000000	70.000000	22.000000	40.000000
Years	1.000000	6.000000	18.000000	6.000000	7.000000	10.000000
CAtBat	426.000000	1924.000000	8424.000000	2695.000000	1931.000000	2331.000000
CHits	109.000000	489.000000	2464.000000	747.000000	491.000000	604.000000
CHmRun	3.000000	67.000000	164.000000	17.000000	13.000000	61.000000
CRuns	55.000000	242.000000	1008.000000	442.000000	291.000000	246.000000
CRBI	43.000000	251.000000	1072.000000	198.000000	108.000000	327.000000
CWalks	62.000000	240.000000	402.000000	317.000000	180.000000	166.000000
PutOuts	361.000000	518.000000	1067.000000	434.000000	222.000000	732.000000
Assists	22.000000	55.000000	157.000000	9.000000	3.000000	83.000000
Errors	2.000000	3.000000	14.000000	3.000000	3.000000	13.000000
bSalary	6.146816	9.111998	9.62336	9.592987	9.43929	9.553321

	25	26	27	28	29	30
AtBat	550.000000	513.000000	419.000000	583.000000	204.000000	379.000000
Hits	152.000000	137.000000	108.000000	168.000000	49.000000	106.000000
HmRun	6.000000	20.000000	6.000000	17.000000	6.000000	10.000000
Runs	92.000000	90.000000	55.000000	83.000000	23.000000	38.000000
RBI	37.000000	95.000000	36.000000	80.000000	25.000000	60.000000
Walks	81.000000	90.000000	22.000000	56.000000	12.000000	30.000000
Years	5.000000	14.000000	3.000000	5.000000	7.000000	14.000000
CAtBat	2308.000000	5201.000000	591.000000	1646.000000	1309.000000	6207.000000
CHits	633.000000	1382.000000	149.000000	452.000000	308.000000	1906.000000
CHmRun	32.000000	166.000000	8.000000	44.000000	27.000000	146.000000
CRuns	349.000000	763.000000	80.000000	219.000000	126.000000	859.000000
CRBI	182.000000	734.000000	46.000000	208.000000	132.000000	803.000000
CWalks	308.000000	784.000000	31.000000	136.000000	66.000000	571.000000
PutOuts	262.000000	267.000000	226.000000	109.000000	419.000000	72.000000
Assists	329.000000	5.000000	7.000000	292.000000	46.000000	170.000000
Errors	16.000000	3.000000	4.000000	25.000000	5.000000	24.000000
bSalary	9.191964	9.921648	6.073906	9.152346	7.805115	9.805418
	31	32	33	34	35	36
AtBat	268.000000	181.000000	217.000000	254.000000	416.000000	205.000000
Hits	60.000000	41.000000	46.000000	68.000000	132.000000	57.000000
HmRun	5.000000	1.000000	7.000000	2.000000	7.000000	8.000000
Runs	24.000000	15.000000	32.000000	28.000000	57.000000	34.000000
RBI	25.000000	21.000000	19.000000	26.000000	49.000000	32.000000
Walks	15.000000	33.000000	9.000000	22.000000	33.000000	9.000000
Years	2.000000	2.000000	4.000000	6.000000	3.000000	5.000000
CAtBat	350.000000	232.000000	694.000000	999.000000	932.000000	756.000000
CHits	78.000000	50.000000	160.000000	236.000000	273.000000	192.000000
CHmRun	5.000000	4.000000	32.000000	21.000000	24.000000	32.000000
CRuns	34.000000	20.000000	86.000000	108.000000	113.000000	117.000000
CRBI	29.000000	29.000000	76.000000	117.000000	121.000000	107.000000
CWalks	18.000000	45.000000	32.000000	118.000000	80.000000	51.000000
PutOuts	442.000000	326.000000	307.000000	359.000000	73.000000	58.000000
Assists	59.000000	29.000000	25.000000	30.000000	177.000000	4.000000
Errors	6.000000	5.000000	1.000000	4.000000	18.000000	4.000000
bSalary	5.748955	5.294864	6.900951	7.835188	7.209974	7.458923
	37	38	39	40	41	42
AtBat	526.000000	457.000000	214.000000	591.000000	403.000000	405.000000
Hits	146.000000	101.000000	53.000000	168.000000	101.000000	102.000000
HmRun	13.000000	14.000000	2.000000	19.000000	12.000000	18.000000
Runs	71.000000	42.000000	30.000000	80.000000	45.000000	49.000000
RBI	70.000000	63.000000	29.000000	72.000000	53.000000	85.000000
Walks	84.000000	22.000000	23.000000	39.000000	39.000000	20.000000
Years	6.000000	17.000000	2.000000	9.000000	12.000000	6.000000
CAtBat	2648.000000	6521.000000	226.000000	4478.000000	5150.000000	950.000000

CHits	715.000000	1767.000000	59.000000	1307.000000	1429.000000	231.000000
CHmRun	77.000000	281.000000	2.000000	113.000000	166.000000	29.000000
CRuns	352.000000	1003.000000	32.000000	634.000000	747.000000	99.000000
CRBI	342.000000	977.000000	32.000000	563.000000	666.000000	138.000000
CWalks	289.000000	619.000000	27.000000	319.000000	526.000000	64.000000
PutOuts	303.000000	389.000000	109.000000	67.000000	316.000000	161.000000
Assists	9.000000	39.000000	7.000000	147.000000	6.000000	10.000000
Errors	9.000000	4.000000	3.000000	4.000000	5.000000	3.000000
bSalary	9.720358	9.864276	5.351515	10.51733	9.343658	8.405125
	43	44	45	46	47	48
AtBat	244.000000	313.000000	627.000000	416.000000	155.000000	236.000000
Hits	58.000000	78.000000	177.000000	113.000000	44.000000	56.000000
HmRun	9.000000	6.000000	25.000000	24.000000	6.000000	0.000000
Runs	28.000000	32.000000	98.000000	58.000000	21.000000	27.000000
RBI	25.000000	41.000000	81.000000	69.000000	23.000000	15.000000
Walks	35.000000	12.000000	70.000000	16.000000	15.000000	11.000000
Years	4.000000	12.000000	6.000000	1.000000	16.000000	4.000000
CAtBat	1335.000000	3742.000000	3210.000000	416.000000	6631.000000	1115.000000
CHits	333.000000	968.000000	927.000000	113.000000	1634.000000	270.000000
CHmRun	49.000000	35.000000	133.000000	24.000000	98.000000	1.000000
CRuns	164.000000	409.000000	529.000000	58.000000	698.000000	116.000000
CRBI	179.000000	321.000000	472.000000	69.000000	661.000000	64.000000
CWalks	194.000000	170.000000	313.000000	16.000000	777.000000	57.000000
PutOuts	142.000000	106.000000	240.000000	203.000000	53.000000	125.000000
Assists	14.000000	206.000000	482.000000	70.000000	88.000000	199.000000
Errors	2.000000	7.000000	13.000000	10.000000	3.000000	13.000000
bSalary	8.034135	8.412666	10.76644	5.748955	7.647665	7.328782
	49	50	51	52	53	54
AtBat	216.000000	585.000000	199.000000	521.000000	311.000000	512.000000
Hits	53.000000	139.000000	53.000000	142.000000	81.000000	131.000000
HmRun	1.000000	31.000000	5.000000	20.000000	3.000000	26.000000
Runs	31.000000	93.000000	29.000000	67.000000	42.000000	69.000000
RBI	15.000000	94.000000	22.000000	86.000000	30.000000	96.000000
Walks	22.000000	62.000000	21.000000	45.000000	26.000000	52.000000
Years	4.000000	17.000000	3.000000	4.000000	17.000000	14.000000
CAtBat	926.000000	7546.000000	514.000000	815.000000	8247.000000	5347.000000
CHits	210.000000	1982.000000	120.000000	205.000000	2198.000000	1397.000000
CHmRun	9.000000	315.000000	8.000000	22.000000	100.000000	221.000000
CRuns	118.000000	1141.000000	57.000000	99.000000	950.000000	712.000000
CRBI	69.000000	1179.000000	40.000000	103.000000	909.000000	815.000000
CWalks	114.000000	727.000000	39.000000	78.000000	690.000000	548.000000
PutOuts	73.000000	0.000000	152.000000	107.000000	153.000000	119.000000
Assists	152.000000	0.000000	3.000000	242.000000	223.000000	216.000000
Errors	11.000000	0.000000	5.000000	23.000000	10.000000	12.000000
bSalary	7.289971	10.03223	5.459584	5.997965	7.922831	9.805418

	55	56	57	58	59	60
AtBat	507.000000	529.000000	424.000000	351.000000	388.000000	339.000000
Hits	122.000000	137.000000	119.000000	97.000000	103.000000	96.000000
HmRun	29.000000	26.000000	6.000000	4.000000	15.000000	4.000000
Runs	78.000000	86.000000	57.000000	55.000000	59.000000	37.000000
RBI	85.000000	97.000000	46.000000	29.000000	47.000000	29.000000
Walks	91.000000	97.000000	13.000000	39.000000	39.000000	23.000000
Years	18.000000	15.000000	9.000000	4.000000	6.000000	4.000000
CAtBat	7761.000000	6661.000000	3651.000000	1258.000000	2174.000000	1064.000000
CHits	1947.000000	1785.000000	1046.000000	353.000000	555.000000	290.000000
CHmRun	347.000000	291.000000	32.000000	16.000000	80.000000	11.000000
CRuns	1175.000000	1082.000000	461.000000	196.000000	285.000000	123.000000
CRBI	1152.000000	949.000000	301.000000	110.000000	274.000000	108.000000
CWalks	1380.000000	989.000000	112.000000	117.000000	186.000000	55.000000
PutOuts	808.000000	280.000000	224.000000	226.000000	182.000000	104.000000
Assists	108.000000	10.000000	286.000000	7.000000	9.000000	213.000000
Errors	2.000000	5.000000	8.000000	3.000000	4.000000	9.000000
bSalary	8.889204	9.995963	9.805418	7.168719	7.951228	7.647665
	61	62	63	64	65	66
AtBat	255.000000	677.000000	614.000000	329.000000	637.000000	280.000000
Hits	70.000000	238.000000	163.000000	83.000000	174.000000	82.000000
HmRun	7.000000	31.000000	29.000000	9.000000	31.000000	16.000000
Runs	49.000000	117.000000	89.000000	50.000000	89.000000	44.000000
RBI	35.000000	113.000000	83.000000	39.000000	116.000000	45.000000
Walks	43.000000	53.000000	75.000000	56.000000	56.000000	47.000000
Years	15.000000	5.000000	11.000000	9.000000	14.000000	2.000000
CAtBat	6311.000000	2223.000000	5017.000000	3828.000000	6727.000000	428.000000
CHits	1661.000000	737.000000	1388.000000	948.000000	2024.000000	113.000000
CHmRun	154.000000	93.000000	266.000000	145.000000	247.000000	25.000000
CRuns	1019.000000	349.000000	813.000000	575.000000	978.000000	61.000000
CRBI	608.000000	401.000000	822.000000	528.000000	1093.000000	70.000000
CWalks	820.000000	171.000000	617.000000	635.000000	495.000000	63.000000
PutOuts	51.000000	1377.000000	303.000000	276.000000	278.000000	148.000000
Assists	54.000000	100.000000	6.000000	6.000000	9.000000	4.000000
Errors	8.000000	6.000000	6.000000	2.000000	9.000000	2.000000
bSalary	8.558048	11.59245	11.50688	9.111998	10.22209	6.073906
	67	68	69	70	71	72
AtBat	155.000000	458.000000	314.0000	475.0000	317.000000	511.000000
Hits	41.000000	114.000000	83.0000	123.0000	78.000000	138.000000
HmRun	12.000000	13.000000	13.0000	27.0000	7.000000	25.000000
Runs	21.000000	67.000000	39.0000	76.0000	35.000000	76.000000
RBI	29.000000	57.000000	46.0000	93.0000	35.000000	96.000000
Walks	22.000000	48.000000	16.0000	72.0000	32.000000	61.000000
Years	16.000000	4.000000	5.0000	4.0000	1.000000	3.000000
CAtBat	5409.000000	1350.000000	1457.0000	1810.0000	317.000000	592.000000

Homework4

CHits	1338.000000	298.000000	405.0000	471.0000	78.000000	164.000000
CHmRun	181.000000	28.000000	28.0000	108.0000	7.000000	28.000000
CRuns	746.000000	160.000000	156.0000	292.0000	35.000000	87.000000
CRBI	805.000000	123.000000	159.0000	343.0000	35.000000	110.000000
CWalks	875.000000	122.000000	76.0000	267.0000	32.000000	71.000000
PutOuts	165.000000	246.000000	533.0000	226.0000	45.000000	157.000000
Assists	9.000000	389.000000	40.0000	10.0000	122.000000	7.000000
Errors	1.000000	18.000000	4.0000	6.0000	26.000000	8.000000
bSalary	7.546928	8.660888	8.4786	10.5521	5.351515	6.532574
	73	74	75	76	77	78
AtBat	382.000000	565.000000	415.000000	424.000000	495.0000	233.000000
Hits	119.000000	148.000000	115.000000	110.000000	151.0000	49.000000
HmRun	13.000000	24.000000	27.000000	15.000000	17.0000	2.000000
Runs	54.000000	90.000000	97.000000	70.000000	61.0000	41.000000
RBI	58.000000	104.000000	71.000000	47.000000	84.0000	23.000000
Walks	36.000000	77.000000	68.000000	36.000000	78.0000	18.000000
Years	12.000000	14.000000	3.000000	7.000000	10.0000	8.000000
CAtBat	2133.000000	7287.000000	711.000000	2130.000000	5624.0000	1350.000000
CHits	594.000000	2083.000000	184.000000	544.000000	1679.0000	336.000000
CHmRun	41.000000	305.000000	45.000000	38.000000	275.0000	7.000000
CRuns	287.000000	1135.000000	156.000000	335.000000	884.0000	166.000000
CRBI	294.000000	1234.000000	119.000000	174.000000	1015.0000	122.000000
CWalks	227.000000	791.000000	99.000000	258.000000	709.0000	106.000000
PutOuts	59.000000	292.000000	274.000000	292.000000	1045.0000	102.000000
Assists	156.000000	9.000000	2.000000	6.000000	88.0000	132.000000
Errors	9.000000	5.000000	7.000000	3.000000	13.0000	10.000000
bSalary	9.095647	11.46173	7.805115	8.720289	12.0844	8.215524
	79	80	81	82	83	84
AtBat	566.000000	641.000000	215.000000	441.000000	325.000000	490.000000
Hits	154.000000	198.000000	51.000000	128.000000	76.000000	125.000000
HmRun	22.000000	31.000000	4.000000	16.000000	16.000000	24.000000
Runs	76.000000	101.000000	19.000000	70.000000	33.000000	81.000000
RBI	84.000000	108.000000	18.000000	73.000000	52.000000	105.000000
Walks	43.000000	41.000000	11.000000	80.000000	37.000000	62.000000
Years	14.000000	5.000000	1.000000	14.000000	5.000000	13.000000
CAtBat	6100.000000	2129.000000	215.000000	6675.000000	1506.000000	6063.000000
CHits	1583.000000	610.000000	51.000000	2095.000000	351.000000	1646.000000
CHmRun	131.000000	92.000000	4.000000	209.000000	71.000000	271.000000
CRuns	743.000000	297.000000	19.000000	1072.000000	195.000000	847.000000
CRBI	693.000000	319.000000	18.000000	1050.000000	219.000000	999.000000
CWalks	300.000000	117.000000	11.000000	695.000000	214.000000	680.000000
PutOuts	316.000000	269.000000	116.000000	97.000000	726.000000	869.000000
Assists	439.000000	17.000000	5.000000	218.000000	87.000000	62.000000
Errors	10.000000	10.000000	12.000000	16.000000	3.000000	8.000000
bSalary	9.553321	10.47312	5.351515	10.99189	8.264562	11.53639

	85	86	87	88	89	90
AtBat	574.000000	596.000000	472.000000	283.000000	408.000000	327.000000
Hits	152.000000	171.000000	118.000000	77.000000	94.000000	85.000000
HmRun	31.000000	34.000000	12.000000	14.000000	4.000000	3.000000
Runs	91.000000	91.000000	63.000000	45.000000	42.000000	30.000000
RBI	101.000000	108.000000	54.000000	47.000000	36.000000	44.000000
Walks	64.000000	52.000000	30.000000	26.000000	66.000000	20.000000
Years	3.000000	6.000000	4.000000	16.000000	9.000000	8.000000
CAtBat	985.000000	2862.000000	793.000000	6840.000000	3573.000000	2140.000000
CHits	260.000000	728.000000	187.000000	1910.000000	866.000000	568.000000
CHmRun	53.000000	107.000000	14.000000	259.000000	59.000000	16.000000
CRuns	148.000000	361.000000	102.000000	915.000000	429.000000	216.000000
CRBI	173.000000	401.000000	80.000000	1067.000000	365.000000	208.000000
CWalks	95.000000	224.000000	50.000000	546.000000	410.000000	93.000000
PutOuts	1253.000000	118.000000	228.000000	144.000000	282.000000	91.000000
Assists	111.000000	334.000000	377.000000	6.000000	487.000000	185.000000
Errors	11.000000	21.000000	26.000000	5.000000	19.000000	12.000000
bSalary	7.209974	9.921648	6.645307	9.415767	8.889204	8.152552
	91	92	93	94	95	96
AtBat	370.000000	354.000000	539.000000	340.000000	510.000000	282.000000
Hits	96.000000	77.000000	139.000000	84.000000	126.000000	78.000000
HmRun	21.000000	16.000000	5.000000	11.000000	2.000000	13.000000
Runs	49.000000	36.000000	93.000000	62.000000	42.000000	37.000000
RBI	46.000000	55.000000	58.000000	33.000000	44.000000	51.000000
Walks	60.000000	41.000000	69.000000	47.000000	35.000000	29.000000
Years	15.000000	20.000000	5.000000	5.000000	11.000000	5.000000
CAtBat	6986.000000	8716.000000	1469.000000	1516.000000	5562.000000	1649.000000
CHits	1972.000000	2172.000000	369.000000	376.000000	1578.000000	453.000000
CHmRun	231.000000	384.000000	12.000000	42.000000	44.000000	73.000000
CRuns	1070.000000	1172.000000	247.000000	284.000000	703.000000	211.000000
CRBI	955.000000	1267.000000	126.000000	141.000000	519.000000	280.000000
CWalks	921.000000	1057.000000	198.000000	219.000000	256.000000	138.000000
PutOuts	137.000000	83.000000	462.000000	185.000000	207.000000	670.000000
Assists	5.000000	174.000000	9.000000	8.000000	358.000000	57.000000
Errors	9.000000	16.000000	7.000000	4.000000	20.000000	5.000000
bSalary	9.508406	7.083499	8.336024	8.336024	9.519721	8.758991
	97	98	99	100	101	102
AtBat	380.000000	584.000000	570.000000	306.000000	220.000000	278.000000
Hits	120.000000	158.000000	169.000000	104.000000	54.000000	70.000000
HmRun	5.000000	15.000000	21.000000	14.000000	10.000000	7.000000
Runs	54.000000	70.000000	72.000000	50.000000	30.000000	22.000000
RBI	51.000000	84.000000	88.000000	58.000000	39.000000	37.000000
Walks	31.000000	42.000000	38.000000	25.000000	31.000000	18.000000
Years	8.000000	5.000000	7.000000	7.000000	5.000000	18.000000
CAtBat	3118.000000	2358.000000	3754.000000	2954.000000	1185.000000	7186.000000

CHits	900.000000	636.000000	1077.000000	822.000000	299.000000	2081.000000
CHmRun	92.000000	58.000000	140.000000	55.000000	40.000000	190.000000
CRuns	444.000000	265.000000	492.000000	313.000000	145.000000	935.000000
CRBI	419.000000	316.000000	589.000000	377.000000	154.000000	1088.000000
CWalks	240.000000	134.000000	263.000000	187.000000	128.000000	643.000000
PutOuts	237.000000	331.000000	295.000000	116.000000	50.000000	0.000000
Assists	8.000000	20.000000	15.000000	222.000000	136.000000	0.000000
Errors	1.000000	4.000000	5.000000	15.000000	20.000000	0.000000
bSalary	9.111998	9.306702	10.03223	9.553321	7.78991	7.951228
	103	104	105	106	107	108
AtBat	445.000000	143.000000	185.000000	589.000000	343.000000	438.000000
Hits	99.000000	39.000000	40.000000	170.000000	103.000000	103.000000
HmRun	1.000000	5.000000	4.000000	40.000000	6.000000	2.000000
Runs	46.000000	18.000000	23.000000	107.000000	48.000000	65.000000
RBI	24.000000	30.000000	11.000000	108.000000	36.000000	32.000000
Walks	29.000000	15.000000	18.000000	69.000000	40.000000	71.000000
Years	4.000000	9.000000	3.000000	6.000000	15.000000	2.000000
CAtBat	618.000000	639.000000	524.000000	2325.000000	4338.000000	440.000000
CHits	129.000000	151.000000	125.000000	634.000000	1193.000000	103.000000
CHmRun	1.000000	16.000000	7.000000	128.000000	70.000000	2.000000
CRuns	72.000000	80.000000	58.000000	371.000000	581.000000	67.000000
CRBI	31.000000	97.000000	37.000000	376.000000	421.000000	32.000000
CWalks	48.000000	61.000000	47.000000	238.000000	325.000000	71.000000
PutOuts	278.000000	138.000000	97.000000	368.000000	211.000000	276.000000
Assists	415.000000	15.000000	2.000000	20.000000	56.000000	7.000000
Errors	16.000000	1.000000	2.000000	3.000000	13.000000	9.000000
bSalary	5.703882	6.852483	5.748955	10.58211	8.472026	5.918716
	109	110	111	112	113	114
AtBat	600.000000	663.000000	232.000000	479.000000	528.000000	160.000000
Hits	144.000000	200.000000	55.000000	133.000000	132.000000	39.000000
HmRun	33.000000	29.000000	9.000000	10.000000	21.000000	8.000000
Runs	85.000000	108.000000	34.000000	48.000000	61.000000	18.000000
RBI	117.000000	121.000000	23.000000	72.000000	74.000000	31.000000
Walks	65.000000	32.000000	45.000000	55.000000	41.000000	22.000000
Years	2.000000	4.000000	12.000000	17.000000	6.000000	14.000000
CAtBat	696.000000	1447.000000	4405.000000	7472.000000	2641.000000	2128.000000
CHits	173.000000	404.000000	1213.000000	2147.000000	671.000000	543.000000
CHmRun	38.000000	57.000000	194.000000	153.000000	97.000000	56.000000
CRuns	101.000000	210.000000	702.000000	980.000000	273.000000	304.000000
CRBI	130.000000	222.000000	705.000000	1032.000000	383.000000	268.000000
CWalks	69.000000	68.000000	625.000000	854.000000	226.000000	298.000000
PutOuts	319.000000	241.000000	623.000000	237.000000	885.000000	33.000000
Assists	4.000000	8.000000	35.000000	5.000000	105.000000	3.000000
Errors	14.000000	6.000000	3.000000	4.000000	8.000000	0.000000
bSalary	6.751707	7.476837	10.68628	9.614723	10.15485	7.647665

	115	116	117	118	119	120
AtBat	599.000000	497.000000	210.0000	151.000000	278.000000	341.000000
Hits	183.000000	136.000000	70.0000	41.000000	86.000000	95.000000
HmRun	10.000000	7.000000	13.0000	4.000000	4.000000	6.000000
Runs	80.000000	58.000000	32.0000	26.000000	33.000000	48.000000
RBI	74.000000	38.000000	51.0000	21.000000	38.000000	42.000000
Walks	32.000000	26.000000	28.0000	19.000000	45.000000	20.000000
Years	5.000000	11.000000	15.0000	2.000000	1.000000	10.000000
CAtBat	2482.000000	3871.000000	4040.0000	288.000000	278.000000	2964.000000
CHits	715.000000	1066.000000	1130.0000	68.000000	86.000000	808.000000
CHmRun	27.000000	40.000000	97.0000	9.000000	4.000000	81.000000
CRuns	330.000000	450.000000	544.0000	45.000000	33.000000	379.000000
CRBI	326.000000	367.000000	462.0000	39.000000	38.000000	428.000000
CWalks	158.000000	241.000000	551.0000	35.000000	45.000000	221.000000
PutOuts	231.000000	304.000000	0.0000	28.000000	102.000000	158.000000
Assists	374.000000	347.000000	0.0000	56.000000	4.000000	4.000000
Errors	18.000000	10.000000	0.0000	2.000000	2.000000	5.000000
bSalary	9.619046	9.805418	8.1653	5.835836	6.073906	5.918716
	121	122	123	124	125	126
AtBat	537.000000	399.000000	309.000000	616.000000	579.000000	165.000000
Hits	147.000000	102.000000	94.000000	163.000000	174.000000	39.000000
HmRun	23.000000	3.000000	5.000000	27.000000	7.000000	2.000000
Runs	58.000000	56.000000	37.000000	83.000000	67.000000	13.000000
RBI	88.000000	34.000000	32.000000	107.000000	78.000000	9.000000
Walks	47.000000	34.000000	26.000000	32.000000	58.000000	16.000000
Years	10.000000	5.000000	13.000000	3.000000	6.000000	3.000000
CAtBat	2744.000000	670.000000	4618.000000	1437.000000	3053.000000	196.000000
CHits	730.000000	167.000000	1330.000000	377.000000	880.000000	44.000000
CHmRun	97.000000	4.000000	57.000000	65.000000	32.000000	2.000000
CRuns	302.000000	89.000000	616.000000	181.000000	366.000000	18.000000
CRBI	351.000000	48.000000	522.000000	227.000000	337.000000	10.000000
CWalks	174.000000	54.000000	436.000000	82.000000	218.000000	18.000000
PutOuts	92.000000	211.000000	161.000000	110.000000	280.000000	332.000000
Assists	257.000000	9.000000	3.000000	308.000000	479.000000	19.000000
Errors	20.000000	3.000000	3.000000	15.000000	5.000000	2.000000
bSalary	7.663974	5.561385	9.111998	7.083499	9.290244	5.459584
	127	128	129	130	131	132
AtBat	618.000000	257.000000	315.000000	591.000000	404.000000	315.000000
Hits	200.000000	66.000000	76.000000	157.000000	92.000000	73.000000
HmRun	20.000000	5.000000	13.000000	16.000000	11.000000	5.000000
Runs	98.000000	31.000000	35.000000	90.000000	54.000000	23.000000
RBI	110.000000	26.000000	60.000000	78.000000	49.000000	37.000000
Walks	62.000000	32.000000	25.000000	26.000000	18.000000	16.000000
Years	13.000000	14.000000	3.000000	4.000000	6.000000	4.000000
CAtBat	7127.000000	3910.000000	630.000000	2020.000000	1354.000000	450.000000

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CHits	2163.00000	979.000000	151.000000	541.00000	325.000000	108.000000
CHmRun	351.00000	33.000000	24.000000	52.00000	30.000000	6.000000
CRuns	1104.00000	518.000000	68.000000	310.00000	188.000000	38.000000
CRBI	1289.00000	324.000000	94.000000	226.00000	135.000000	46.000000
CWalks	564.00000	382.000000	55.000000	91.00000	63.000000	28.000000
PutOuts	330.00000	87.000000	498.000000	290.00000	222.000000	227.000000
Assists	16.00000	166.000000	39.000000	440.00000	5.000000	15.000000
Errors	8.00000	14.000000	13.000000	25.00000	5.000000	3.000000
bSalary	12.04026	7.476837	6.645307	9.23858	7.805115	6.073906
	133	134	135	136	137	138
AtBat	429.000000	453.000000	184.000000	591.000000	181.000000	441.000000
Hits	91.000000	101.000000	47.000000	184.000000	58.000000	118.000000
HmRun	12.000000	3.000000	5.000000	20.000000	6.000000	28.000000
Runs	41.000000	46.000000	20.000000	83.000000	34.000000	84.000000
RBI	42.000000	43.000000	28.000000	79.000000	23.000000	86.000000
Walks	57.000000	61.000000	18.000000	38.000000	22.000000	68.000000
Years	13.000000	3.000000	11.000000	5.000000	1.000000	8.000000
CAtBat	5590.000000	948.000000	3327.000000	1689.000000	181.000000	2723.000000
CHits	1397.000000	218.000000	890.000000	462.000000	58.000000	750.000000
CHmRun	83.000000	6.000000	74.000000	40.000000	6.000000	126.000000
CRuns	578.000000	96.000000	419.000000	219.000000	34.000000	433.000000
CRBI	579.000000	72.000000	382.000000	195.000000	23.000000	420.000000
CWalks	644.000000	91.000000	304.000000	82.000000	22.000000	309.000000
PutOuts	686.000000	249.000000	49.000000	303.000000	88.000000	190.000000
Assists	46.000000	444.000000	2.000000	12.000000	0.000000	2.000000
Errors	4.000000	16.000000	0.000000	5.000000	3.000000	2.000000
bSalary	9.744989	7.039449	8.558048	9.207613	5.685529	10.68628
	139	140	141	142	143	144
AtBat	490.00000	551.00000	550.00000	283.000000	560.000000	328.0000
Hits	150.00000	171.00000	147.00000	74.000000	161.000000	91.0000
HmRun	21.00000	13.00000	29.00000	4.000000	26.000000	12.0000
Runs	69.00000	94.00000	85.00000	34.000000	89.000000	51.0000
RBI	58.00000	83.00000	91.00000	29.000000	96.000000	43.0000
Walks	35.00000	94.00000	71.00000	22.000000	66.000000	33.0000
Years	14.00000	13.00000	6.00000	10.000000	4.000000	2.0000
CAtBat	6126.000000	6090.000000	2816.000000	3919.000000	1789.000000	342.0000
CHits	1839.000000	1840.000000	815.000000	1062.000000	470.000000	94.0000
CHmRun	121.000000	128.000000	117.000000	85.000000	65.000000	12.0000
CRuns	983.000000	969.000000	405.000000	505.000000	233.000000	51.0000
CRBI	707.000000	900.000000	474.000000	456.000000	260.000000	44.0000
CWalks	600.000000	917.000000	319.000000	283.000000	155.000000	33.0000
PutOuts	96.000000	1199.000000	1218.000000	145.000000	332.000000	145.0000
Assists	5.000000	149.000000	104.000000	5.000000	9.000000	59.0000
Errors	3.000000	5.000000	10.000000	7.000000	8.000000	8.0000
bSalary	10.13773	11.38796	10.70253	9.519721	9.191964	6.2845

	145	146	147	148	149	150
AtBat	586.00000	503.000000	344.000000	680.0000	279.000000	484.00000
Hits	159.0000	136.000000	85.000000	223.0000	64.000000	127.00000
HmRun	12.0000	5.000000	24.000000	31.0000	0.000000	20.00000
Runs	72.0000	62.000000	69.000000	119.0000	31.000000	66.00000
RBI	79.0000	48.000000	64.000000	96.0000	26.000000	65.00000
Walks	53.0000	83.000000	88.000000	34.0000	30.000000	67.00000
Years	9.0000	10.000000	7.000000	3.0000	1.000000	7.00000
CAtBat	3082.0000	3423.000000	911.000000	1928.0000	279.000000	3006.00000
CHits	880.0000	970.000000	214.000000	587.0000	64.000000	844.00000
CHmRun	83.0000	20.000000	64.000000	35.0000	0.000000	116.00000
CRuns	363.0000	408.000000	150.000000	262.0000	31.000000	436.00000
CRBI	477.0000	303.000000	156.000000	201.0000	26.000000	458.00000
CWalks	295.0000	414.000000	187.000000	91.0000	30.000000	377.00000
PutOuts	181.0000	65.000000	0.000000	429.0000	107.000000	1231.00000
Assists	13.0000	258.000000	0.000000	8.0000	205.000000	80.00000
Errors	4.0000	8.000000	0.000000	6.0000	16.000000	7.00000
bSalary	10.2254	9.485606	7.805115	8.1653	5.459584	10.48795
	151	152	153	154	155	156
AtBat	431.000000	283.000000	491.000000	199.000000	589.000000	327.000000
Hits	127.000000	70.000000	141.000000	52.000000	149.000000	84.000000
HmRun	8.000000	8.000000	11.000000	9.000000	21.000000	22.000000
Runs	77.000000	33.000000	77.000000	26.000000	89.000000	53.000000
RBI	45.000000	37.000000	47.000000	28.000000	86.000000	62.000000
Walks	58.000000	27.000000	37.000000	21.000000	64.000000	38.000000
Years	2.000000	12.000000	15.000000	6.000000	7.000000	10.000000
CAtBat	667.000000	4479.000000	4291.000000	805.000000	3558.000000	4273.000000
CHits	187.000000	1222.000000	1240.000000	191.000000	928.000000	1123.000000
CHmRun	9.000000	94.000000	84.000000	30.000000	102.000000	212.000000
CRuns	117.000000	557.000000	615.000000	113.000000	513.000000	577.000000
CRBI	64.000000	483.000000	430.000000	119.000000	471.000000	700.000000
CWalks	88.000000	307.000000	340.000000	87.000000	351.000000	334.000000
PutOuts	283.000000	156.000000	239.000000	235.000000	371.000000	483.000000
Assists	8.000000	2.000000	8.000000	22.000000	6.000000	48.000000
Errors	3.000000	2.000000	2.000000	5.000000	6.000000	6.000000
bSalary	7.105156	7.289971	8.852798	7.581072	9.651199	9.682899
	157	158	159	160	161	162
AtBat	464.000000	338.000000	584.000000	216.000000	625.000000	489.000000
Hits	128.000000	92.000000	157.000000	54.000000	179.000000	131.000000
HmRun	28.000000	18.000000	20.000000	2.000000	4.000000	19.000000
Runs	67.000000	42.000000	95.000000	27.000000	94.000000	77.000000
RBI	94.000000	60.000000	73.000000	25.000000	60.000000	55.000000
Walks	52.000000	21.000000	63.000000	33.000000	65.000000	34.000000
Years	13.000000	3.000000	10.000000	1.000000	5.000000	7.000000
CAtBat	5829.000000	682.000000	4704.000000	216.000000	1696.000000	2051.000000

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CHits	1552.000000	185.000000	1320.000000	54.000000	476.000000	549.000000
CHmRun	210.000000	36.000000	93.000000	2.000000	12.000000	62.000000
CRuns	740.000000	88.000000	724.000000	27.000000	216.000000	300.000000
CRBI	840.000000	112.000000	522.000000	25.000000	163.000000	263.000000
CWalks	452.000000	50.000000	576.000000	33.000000	166.000000	153.000000
PutOuts	0.000000	0.000000	276.000000	317.000000	303.000000	310.000000
Assists	0.000000	0.000000	421.000000	36.000000	450.000000	9.000000
Errors	0.000000	0.000000	11.000000	1.000000	14.000000	9.000000
bSalary	9.070889	6.532574	8.427662	5.459584	9.02899	9.631962
	163	164	165	166	167	168
AtBat	209.000000	407.000000	490.000000	442.000000	288.000000	209.000000
Hits	56.000000	93.000000	148.000000	131.000000	65.000000	54.000000
HmRun	12.000000	8.000000	14.000000	18.000000	8.000000	3.000000
Runs	22.000000	47.000000	64.000000	68.000000	30.000000	25.000000
RBI	36.000000	30.000000	78.000000	77.000000	36.000000	14.000000
Walks	19.000000	30.000000	49.000000	33.000000	27.000000	12.000000
Years	2.000000	2.000000	13.000000	6.000000	9.000000	1.000000
CAtBat	216.000000	969.000000	3400.000000	1416.000000	2815.000000	209.000000
CHits	58.000000	230.000000	1000.000000	398.000000	698.000000	54.000000
CHmRun	12.000000	14.000000	113.000000	47.000000	55.000000	3.000000
CRuns	24.000000	121.000000	445.000000	210.000000	315.000000	25.000000
CRBI	37.000000	69.000000	491.000000	203.000000	325.000000	14.000000
CWalks	19.000000	68.000000	301.000000	136.000000	189.000000	12.000000
PutOuts	201.000000	172.000000	0.000000	233.000000	259.000000	102.000000
Assists	6.000000	317.000000	0.000000	7.000000	30.000000	6.000000
Errors	3.000000	25.000000	0.000000	7.000000	10.000000	3.000000
bSalary	5.748955	6.589782	9.415767	8.942687	9.269117	5.306343
	169	170	171	172	173	174
AtBat	303.000000	330.000000	504.000000	258.000000	20.000000	374.000000
Hits	71.000000	77.000000	120.000000	60.000000	1.000000	94.000000
HmRun	3.000000	19.000000	28.000000	8.000000	0.000000	5.000000
Runs	18.000000	47.000000	71.000000	28.000000	0.000000	36.000000
RBI	30.000000	53.000000	71.000000	33.000000	0.000000	26.000000
Walks	36.000000	27.000000	54.000000	18.000000	0.000000	62.000000
Years	3.000000	6.000000	3.000000	3.000000	2.000000	7.000000
CAtBat	344.000000	1928.000000	1085.000000	638.000000	41.000000	1968.000000
CHits	76.000000	516.000000	259.000000	170.000000	9.000000	519.000000
CHmRun	3.000000	90.000000	54.000000	17.000000	2.000000	26.000000
CRuns	20.000000	247.000000	150.000000	80.000000	6.000000	181.000000
CRBI	36.000000	288.000000	167.000000	75.000000	7.000000	199.000000
CWalks	45.000000	161.000000	114.000000	36.000000	4.000000	288.000000
PutOuts	468.000000	149.000000	103.000000	358.000000	78.000000	756.000000
Assists	47.000000	8.000000	283.000000	32.000000	220.000000	64.000000
Errors	6.000000	6.000000	19.000000	8.000000	6.000000	15.000000
bSalary	5.918716	9.32895	6.852483	6.43726	11.75764	9.864276

	175	176	177	178	179	180
AtBat	211.000000	299.000000	576.000000	381.000000	288.000000	369.000000
Hits	43.000000	75.000000	167.000000	110.000000	76.000000	93.000000
HmRun	10.000000	6.000000	8.000000	9.000000	7.000000	9.000000
Runs	26.000000	38.000000	89.000000	61.000000	34.000000	43.000000
RBI	35.000000	23.000000	49.000000	45.000000	37.000000	42.000000
Walks	39.000000	26.000000	57.000000	32.000000	15.000000	49.000000
Years	3.000000	3.000000	4.000000	7.000000	4.000000	5.000000
CAtBat	498.000000	580.000000	822.000000	3015.000000	1644.000000	1258.000000
CHits	116.000000	160.000000	232.000000	834.000000	408.000000	323.000000
CHmRun	14.000000	8.000000	19.000000	40.000000	16.000000	54.000000
CRuns	59.000000	71.000000	132.000000	451.000000	198.000000	181.000000
CRBI	55.000000	33.000000	83.000000	249.000000	120.000000	177.000000
CWalks	78.000000	44.000000	79.000000	168.000000	113.000000	157.000000
PutOuts	463.000000	212.000000	325.000000	228.000000	203.000000	149.000000
Assists	32.000000	1.000000	12.000000	7.000000	3.000000	1.000000
Errors	8.000000	2.000000	8.000000	5.000000	3.000000	6.000000
bSalary	6.216943	6.473573	7.168719	9.682899	7.404191	8.087605
	181	182	183	184	185	186
AtBat	547.000000	572.000000	514.000000	359.000000	526.000000	313.000000
Hits	137.000000	152.000000	144.000000	80.000000	163.000000	83.000000
HmRun	2.000000	18.000000	0.000000	15.000000	12.000000	9.000000
Runs	58.000000	105.000000	67.000000	45.000000	88.000000	43.000000
RBI	47.000000	49.000000	54.000000	48.000000	50.000000	41.000000
Walks	12.000000	65.000000	79.000000	63.000000	77.000000	30.000000
Years	2.000000	2.000000	9.000000	7.000000	4.000000	14.000000
CAtBat	1038.000000	978.000000	4739.000000	1493.000000	1556.000000	5885.000000
CHits	271.000000	249.000000	1169.000000	359.000000	470.000000	1543.000000
CHmRun	3.000000	36.000000	13.000000	61.000000	38.000000	104.000000
CRuns	129.000000	168.000000	583.000000	176.000000	245.000000	751.000000
CRBI	80.000000	91.000000	374.000000	202.000000	167.000000	714.000000
CWalks	24.000000	101.000000	528.000000	175.000000	174.000000	535.000000
PutOuts	261.000000	325.000000	229.000000	682.000000	250.000000	58.000000
Assists	459.000000	13.000000	453.000000	93.000000	11.000000	141.000000
Errors	22.000000	3.000000	15.000000	13.000000	1.000000	23.000000
bSalary	6.852483	7.083499	11.55288	9.415767	9.553321	8.558048
	187	188	189	190	191	192
AtBat	540.000000	437.000000	237.000000	236.000000	473.000000	309.000000
Hits	135.000000	123.000000	52.000000	56.000000	154.000000	72.000000
HmRun	30.000000	9.000000	0.000000	6.000000	6.000000	0.000000
Runs	82.000000	62.000000	15.000000	41.000000	61.000000	33.000000
RBI	88.000000	55.000000	25.000000	19.000000	48.000000	31.000000
Walks	55.000000	40.000000	30.000000	21.000000	29.000000	26.000000
Years	1.000000	9.000000	24.000000	5.000000	6.000000	5.000000
CAtBat	540.000000	4139.000000	14053.000000	1257.000000	1966.000000	354.000000

CHits	135.000000	1203.00000	4256.000000	329.000000	566.000000	82.000000
CHmRun	30.000000	79.00000	160.000000	24.000000	29.000000	0.000000
CRuns	82.000000	676.00000	2165.000000	166.000000	250.000000	41.000000
CRBI	88.000000	390.00000	1314.000000	125.000000	252.000000	32.000000
CWalks	55.000000	364.00000	1566.000000	105.000000	178.000000	26.000000
PutOuts	157.000000	82.00000	523.000000	172.000000	846.000000	117.000000
Assists	6.000000	170.00000	43.000000	1.000000	84.000000	269.000000
Errors	14.000000	15.00000	6.000000	4.000000	9.000000	12.000000
bSalary	6.822803	10.62014	9.553321	6.994377	9.045847	6.34968
	193	194	195	196	197	198
AtBat	271.000000	357.000000	216.000000	256.0000	466.000000	327.000000
Hits	77.000000	96.000000	56.000000	70.0000	108.000000	68.000000
HmRun	5.000000	7.000000	4.000000	13.0000	33.000000	13.000000
Runs	35.000000	50.000000	22.000000	42.0000	75.000000	42.000000
RBI	29.000000	45.000000	18.000000	36.0000	86.000000	29.000000
Walks	33.000000	39.000000	15.000000	44.0000	72.000000	45.000000
Years	12.000000	5.000000	12.000000	16.0000	3.000000	18.000000
CAtBat	4933.000000	1394.000000	2796.000000	7058.0000	652.000000	3949.000000
CHits	1358.000000	344.000000	665.000000	1845.0000	142.000000	939.000000
CHmRun	48.000000	43.000000	43.000000	312.0000	44.000000	78.000000
CRuns	630.000000	178.000000	266.000000	965.0000	102.000000	438.000000
CRBI	435.000000	192.000000	304.000000	1128.0000	109.000000	380.000000
CWalks	403.000000	136.000000	198.000000	990.0000	102.000000	466.000000
PutOuts	62.000000	167.000000	391.000000	41.0000	286.000000	659.000000
Assists	90.000000	2.000000	44.000000	118.0000	8.000000	53.000000
Errors	3.000000	4.000000	4.000000	8.0000	8.000000	7.000000
bSalary	8.558048	7.805115	7.476837	10.2386	7.209974	8.336024
	199	200	201	202	203	204
AtBat	341.000000	608.0000	419.000000	376.000000	486.000000	246.000000
Hits	110.000000	160.0000	101.000000	82.000000	145.000000	76.000000
HmRun	9.000000	28.0000	18.000000	21.000000	11.000000	5.000000
Runs	45.000000	130.0000	65.000000	42.000000	51.000000	35.000000
RBI	49.000000	74.0000	58.000000	60.000000	76.000000	39.000000
Walks	46.000000	89.0000	92.000000	35.000000	40.000000	13.000000
Years	9.000000	8.0000	20.000000	5.000000	11.000000	6.000000
CAtBat	2331.000000	4071.0000	9528.000000	1770.000000	3967.000000	912.000000
CHits	658.000000	1182.0000	2510.000000	408.000000	1102.000000	234.000000
CHmRun	50.000000	103.0000	548.000000	115.000000	67.000000	12.000000
CRuns	249.000000	862.0000	1509.000000	238.000000	410.000000	102.000000
CRBI	322.000000	417.0000	1659.000000	299.000000	497.000000	96.000000
CWalks	274.000000	708.0000	1342.000000	157.000000	284.000000	80.000000
PutOuts	251.000000	426.0000	0.000000	0.000000	88.000000	44.000000
Assists	9.000000	4.0000	0.000000	0.000000	204.000000	0.000000
Errors	4.000000	6.0000	0.000000	0.000000	16.000000	1.000000
bSalary	8.977622	11.2242	8.710503	8.449961	8.758991	7.476837

	205	206	207	208	209	210
AtBat	205.000000	348.000000	523.000000	312.000000	496.000000	126.000000
Hits	52.000000	90.000000	135.000000	68.000000	119.000000	27.000000
HmRun	8.000000	11.000000	8.000000	2.000000	8.000000	3.000000
Runs	31.000000	50.000000	52.000000	32.000000	57.000000	8.000000
RBI	27.000000	45.000000	44.000000	22.000000	33.000000	10.000000
Walks	17.000000	43.000000	52.000000	24.000000	21.000000	5.000000
Years	12.000000	10.000000	9.000000	1.000000	7.000000	4.000000
CAtBat	5134.000000	2288.000000	3368.000000	312.000000	3358.000000	239.000000
CHits	1323.000000	614.000000	895.000000	68.000000	882.000000	49.000000
CHmRun	56.000000	43.000000	39.000000	2.000000	36.000000	3.000000
CRuns	643.000000	295.000000	377.000000	32.000000	365.000000	16.000000
CRBI	445.000000	273.000000	284.000000	22.000000	280.000000	13.000000
CWalks	459.000000	269.000000	296.000000	24.000000	165.000000	14.000000
PutOuts	155.000000	60.000000	367.000000	86.000000	155.000000	190.000000
Assists	3.000000	176.000000	475.000000	150.000000	371.000000	2.000000
Errors	2.000000	6.000000	19.000000	15.000000	29.000000	9.000000
bSalary	8.336024	8.558048	9.553321	5.351515	9.864276	6.994377
	211	212	213	214	215	216
AtBat	275.000000	627.000000	394.000000	208.000000	382.000000	459.000000
Hits	68.000000	178.000000	86.000000	57.000000	101.000000	113.000000
HmRun	5.000000	14.000000	1.000000	8.000000	16.000000	20.000000
Runs	42.000000	68.000000	38.000000	32.000000	50.000000	59.000000
RBI	42.000000	76.000000	28.000000	25.000000	55.000000	57.000000
Walks	61.000000	46.000000	36.000000	18.000000	22.000000	68.000000
Years	6.000000	6.000000	4.000000	3.000000	1.000000	12.000000
CAtBat	961.000000	3146.000000	1089.000000	653.000000	382.000000	5348.000000
CHits	238.000000	902.000000	267.000000	170.000000	101.000000	1369.000000
CHmRun	16.000000	74.000000	3.000000	17.000000	16.000000	155.000000
CRuns	128.000000	494.000000	94.000000	98.000000	50.000000	713.000000
CRBI	104.000000	345.000000	71.000000	54.000000	55.000000	660.000000
CWalks	172.000000	242.000000	76.000000	62.000000	22.000000	735.000000
PutOuts	181.000000	309.000000	203.000000	42.000000	200.000000	0.000000
Assists	3.000000	492.000000	369.000000	94.000000	7.000000	0.000000
Errors	2.000000	5.000000	16.000000	13.000000	6.000000	0.000000
bSalary	7.003475	9.526481	7.476837	6.473573	5.877752	9.526481
	217	218	219	220	221	222
AtBat	549.000000	288.000000	522.000000	512.000000	220.000000	522.000000
Hits	149.000000	63.000000	163.000000	117.000000	66.000000	140.000000
HmRun	7.000000	3.000000	9.000000	29.000000	5.000000	16.000000
Runs	73.000000	25.000000	82.000000	54.000000	20.000000	73.000000
RBI	47.000000	33.000000	46.000000	88.000000	28.000000	77.000000
Walks	42.000000	16.000000	62.000000	43.000000	13.000000	60.000000
Years	1.000000	10.000000	13.000000	6.000000	3.000000	4.000000
CAtBat	549.000000	2682.000000	7037.000000	1750.000000	290.000000	730.000000

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CHits	149.000000	667.000000	2019.00000	412.000000	80.000000	185.000000
CHmRun	7.000000	38.000000	153.00000	100.000000	5.000000	22.000000
CRuns	73.000000	315.000000	1043.00000	204.000000	27.000000	93.000000
CRBI	47.000000	259.000000	827.00000	276.000000	31.000000	106.000000
CWalks	42.000000	204.000000	535.00000	155.000000	15.000000	86.000000
PutOuts	255.000000	135.000000	352.00000	1236.000000	281.000000	1320.000000
Assists	450.000000	257.000000	9.00000	98.000000	21.000000	166.000000
Errors	17.000000	7.000000	1.00000	18.000000	3.000000	17.000000
bSalary	6.473573	8.043145	10.13773	5.918716	5.748955	7.083499
	223	224	225	226	227	228
AtBat	461.000000	581.000000	530.000000	557.00000	439.000000	453.000000
Hits	112.000000	145.000000	159.00000	142.00000	96.000000	103.000000
HmRun	18.000000	17.000000	3.00000	21.00000	0.000000	8.000000
Runs	54.000000	66.000000	82.00000	58.00000	44.000000	53.000000
RBI	54.000000	68.000000	50.00000	81.00000	36.000000	33.000000
Walks	35.000000	21.000000	47.00000	23.00000	65.000000	52.000000
Years	2.000000	2.000000	6.00000	18.00000	4.000000	2.000000
CAtBat	680.000000	831.000000	1619.000000	8759.00000	711.000000	507.000000
CHits	160.000000	210.000000	426.000000	2583.00000	148.000000	123.000000
CHmRun	24.000000	21.000000	11.00000	271.00000	1.000000	8.000000
CRuns	76.000000	106.000000	218.00000	1138.00000	68.000000	63.000000
CRBI	75.000000	86.000000	149.00000	1299.00000	56.000000	39.000000
CWalks	49.000000	40.000000	163.00000	478.00000	99.000000	58.000000
PutOuts	111.000000	320.000000	196.00000	1160.00000	229.000000	289.000000
Assists	226.000000	465.000000	354.00000	53.00000	406.000000	407.000000
Errors	11.000000	32.000000	15.00000	7.00000	22.000000	6.000000
bSalary	6.412654	6.645307	8.660888	10.91908	6.589782	5.997965
	229	230	231	232	233	234
AtBat	528.000000	633.000000	562.000000	281.000000	593.000000	687.000000
Hits	122.000000	210.000000	169.000000	76.000000	152.000000	213.000000
HmRun	1.000000	6.000000	17.000000	3.000000	23.000000	10.000000
Runs	67.000000	91.000000	88.000000	42.000000	69.000000	91.000000
RBI	45.000000	56.000000	73.000000	25.000000	75.000000	65.000000
Walks	51.000000	59.000000	53.000000	20.000000	53.000000	27.000000
Years	4.000000	6.000000	8.000000	8.000000	6.000000	4.000000
CAtBat	1716.000000	3070.000000	3181.000000	2658.000000	2765.000000	1518.000000
CHits	403.000000	872.000000	841.000000	657.000000	686.000000	448.000000
CHmRun	12.000000	19.000000	61.000000	48.000000	133.000000	15.000000
CRuns	211.000000	420.000000	450.000000	324.000000	369.000000	196.000000
CRBI	146.000000	230.000000	342.000000	300.000000	384.000000	137.000000
CWalks	155.000000	274.000000	373.000000	179.000000	321.000000	89.000000
PutOuts	209.000000	367.000000	351.000000	106.000000	315.000000	294.000000
Assists	372.000000	432.000000	442.000000	144.000000	10.000000	445.000000
Errors	17.000000	16.000000	17.000000	7.000000	6.000000	13.000000
bSalary	8.087605	5.748955	8.871078	8.043145	10.01054	8.087605

	235	236	237	238	239	240
AtBat	368.000000	263.000000	642.000000	265.000000	559.000000	520.000000
Hits	103.000000	70.000000	211.000000	68.000000	141.000000	120.000000
HmRun	3.000000	1.000000	14.000000	8.000000	2.000000	17.000000
Runs	48.000000	26.000000	107.000000	26.000000	48.000000	53.000000
RBI	28.000000	23.000000	59.000000	30.000000	61.000000	44.000000
Walks	54.000000	30.000000	52.000000	29.000000	73.000000	21.000000
Years	8.000000	4.000000	5.000000	7.000000	8.000000	4.000000
CAtBat	1897.000000	888.000000	2364.000000	1337.000000	3162.000000	927.000000
CHits	493.000000	220.000000	770.000000	339.000000	874.000000	227.000000
CHmRun	9.000000	9.000000	27.000000	32.000000	16.000000	22.000000
CRuns	207.000000	83.000000	352.000000	135.000000	421.000000	106.000000
CRBI	162.000000	82.000000	230.000000	163.000000	349.000000	80.000000
CWalks	198.000000	86.000000	193.000000	128.000000	359.000000	52.000000
PutOuts	209.000000	81.000000	337.000000	92.000000	352.000000	70.000000
Assists	246.000000	147.000000	19.000000	5.000000	414.000000	144.000000
Errors	3.000000	4.000000	4.000000	3.000000	9.000000	11.000000
bSalary	7.960609	7.476837	9.526481	8.449961	9.97761	6.948229
	241	242	243	244	245	246
AtBat	19.000000	205.000000	193.000000	213.000000	510.000000	578.000000
Hits	4.000000	43.000000	47.000000	61.000000	147.000000	138.000000
HmRun	1.000000	2.000000	10.000000	4.000000	10.000000	1.000000
Runs	2.000000	24.000000	21.000000	17.000000	56.000000	56.000000
RBI	3.000000	17.000000	29.000000	22.000000	52.000000	59.000000
Walks	1.000000	20.000000	24.000000	3.000000	53.000000	34.000000
Years	1.000000	7.000000	6.000000	17.000000	7.000000	3.000000
CAtBat	19.000000	854.000000	1136.000000	4061.000000	2872.000000	1399.000000
CHits	4.000000	219.000000	256.000000	1145.000000	821.000000	357.000000
CHmRun	1.000000	12.000000	42.000000	83.000000	63.000000	7.000000
CRuns	2.000000	105.000000	129.000000	488.000000	307.000000	149.000000
CRBI	3.000000	99.000000	139.000000	491.000000	340.000000	161.000000
CWalks	1.000000	71.000000	106.000000	244.000000	174.000000	87.000000
PutOuts	692.000000	131.000000	299.000000	178.000000	810.000000	133.000000
Assists	70.000000	6.000000	13.000000	45.000000	99.000000	371.000000
Errors	8.000000	1.000000	5.000000	4.000000	18.000000	20.000000
bSalary	9.966527	7.722673	7.440846	7.366846	10.42807	6.699251
	247	248	249	250	251	252
AtBat	441.000000	172.000000	127.000000	279.000000	480.000000	600.000000
Hits	113.000000	42.000000	32.000000	69.000000	112.000000	139.000000
HmRun	5.000000	3.000000	4.000000	4.000000	18.000000	0.000000
Runs	76.000000	17.000000	14.000000	35.000000	50.000000	94.000000
RBI	52.000000	14.000000	25.000000	31.000000	71.000000	29.000000
Walks	76.000000	15.000000	12.000000	32.000000	44.000000	60.000000
Years	5.000000	10.000000	19.000000	4.000000	7.000000	2.000000
CAtBat	1546.000000	4086.000000	8396.000000	1359.000000	3031.000000	1236.000000

CHits	397.000000	1150.000000	2402.000000	355.000000	771.000000	309.000000
CHmRun	17.000000	57.000000	242.000000	31.000000	110.000000	1.000000
CRuns	226.000000	579.000000	1048.000000	180.000000	338.000000	201.000000
CRBI	149.000000	363.000000	1348.000000	148.000000	406.000000	69.000000
CWalks	191.000000	406.000000	819.000000	158.000000	239.000000	110.000000
PutOuts	160.000000	65.000000	167.000000	133.000000	94.000000	300.000000
Assists	290.000000	0.000000	18.000000	173.000000	270.000000	12.000000
Errors	11.000000	0.000000	6.000000	9.000000	16.000000	9.000000
bSalary	8.449961	9.921648	8.758991	7.663974	9.553321	6.699251
	253	254	255	256	257	258
AtBat	610.000000	360.000000	387.000000	580.000000	408.000000	593.000000
Hits	186.000000	81.000000	124.000000	207.000000	117.000000	172.000000
HmRun	19.000000	5.000000	1.000000	8.000000	11.000000	22.000000
Runs	107.000000	37.000000	67.000000	107.000000	66.000000	82.000000
RBI	98.000000	44.000000	27.000000	71.000000	41.000000	100.000000
Walks	74.000000	37.000000	36.000000	105.000000	34.000000	57.000000
Years	6.000000	7.000000	7.000000	5.000000	1.000000	1.000000
CAtBat	2728.000000	2268.000000	1775.000000	2778.000000	408.000000	593.000000
CHits	753.000000	566.000000	506.000000	978.000000	117.000000	172.000000
CHmRun	69.000000	41.000000	6.000000	32.000000	11.000000	22.000000
CRuns	399.000000	279.000000	272.000000	474.000000	66.000000	82.000000
CRBI	366.000000	257.000000	125.000000	322.000000	41.000000	100.000000
CWalks	286.000000	246.000000	194.000000	417.000000	34.000000	57.000000
PutOuts	1182.000000	170.000000	186.000000	121.000000	942.000000	1222.000000
Assists	96.000000	284.000000	290.000000	267.000000	72.000000	139.000000
Errors	13.000000	3.000000	17.000000	19.000000	11.000000	15.000000
bSalary	10.68628	8.852798	8.942687	11.13123	6.216943	6.751707
	259	260	261	262	263	
AtBat	497.000000	492.000000	475.000000	573.000000	631.000000	
Hits	127.000000	136.000000	126.000000	144.000000	170.000000	
HmRun	7.000000	5.000000	3.000000	9.000000	9.000000	
Runs	65.000000	76.000000	61.000000	85.000000	77.000000	
RBI	48.000000	50.000000	43.000000	60.000000	44.000000	
Walks	37.000000	94.000000	52.000000	78.000000	31.000000	
Years	5.000000	12.000000	6.000000	8.000000	11.000000	
CAtBat	2703.000000	5511.000000	1700.000000	3198.000000	4908.000000	
CHits	806.000000	1511.000000	433.000000	857.000000	1457.000000	
CHmRun	32.000000	39.000000	7.000000	97.000000	30.000000	
CRuns	379.000000	897.000000	217.000000	470.000000	775.000000	
CRBI	311.000000	451.000000	93.000000	420.000000	357.000000	
CWalks	138.000000	875.000000	146.000000	332.000000	249.000000	
PutOuts	325.000000	313.000000	37.000000	1314.000000	408.000000	
Assists	9.000000	381.000000	113.000000	131.000000	4.000000	
Errors	3.000000	20.000000	7.000000	12.000000	3.000000	
bSalary	9.415767	9.864276	8.264562	10.05372	10.13773	

\$y

[1]	475.000	480.000	500.000	91.500	750.000	70.000	100.000	75.000
[9]	1100.000	517.143	512.500	550.000	700.000	240.000	775.000	175.000
[17]	135.000	100.000	115.000	600.000	776.667	765.000	708.333	750.000
[25]	625.000	900.000	110.000	612.500	300.000	850.000	90.000	67.500
[33]	180.000	305.000	215.000	247.500	815.000	875.000	70.000	1200.000
[41]	675.000	415.000	340.000	416.667	1350.000	90.000	275.000	230.000
[49]	225.000	950.000	75.000	105.000	320.000	850.000	535.000	933.333
[57]	850.000	210.000	325.000	275.000	450.000	1975.000	1900.000	600.000
[65]	1041.667	110.000	260.000	475.000	431.500	1220.000	70.000	145.000
[73]	595.000	1861.460	300.000	490.000	2460.000	375.000	750.000	1175.000
[81]	70.000	1500.000	385.000	1925.571	215.000	900.000	155.000	700.000
[89]	535.000	362.500	733.333	200.000	400.000	400.000	737.500	500.000
[97]	600.000	662.500	950.000	750.000	297.500	325.000	87.500	175.000
[105]	90.000	1237.500	430.000	100.000	165.000	250.000	1300.000	773.333
[113]	1008.333	275.000	775.000	850.000	365.000	95.000	110.000	100.000
[121]	277.500	80.000	600.000	200.000	657.000	75.000	2412.500	250.000
[129]	155.000	640.000	300.000	110.000	825.000	195.000	450.000	630.000
[137]	86.500	1300.000	1000.000	1800.000	1310.000	737.500	625.000	125.000
[145]	1043.333	725.000	300.000	365.000	75.000	1183.333	202.500	225.000
[153]	525.000	265.000	787.500	800.000	587.500	145.000	420.000	75.000
[161]	575.000	780.000	90.000	150.000	700.000	550.000	650.000	68.000
[169]	100.000	670.000	175.000	137.000	2127.333	875.000	120.000	140.000
[177]	210.000	800.000	240.000	350.000	175.000	200.000	1940.000	700.000
[185]	750.000	450.000	172.000	1260.000	750.000	190.000	580.000	130.000
[193]	450.000	300.000	250.000	1050.000	215.000	400.000	560.000	1670.000
[201]	487.500	425.000	500.000	250.000	400.000	450.000	750.000	70.000
[209]	875.000	190.000	191.000	740.000	250.000	140.000	97.500	740.000
[217]	140.000	341.667	1000.000	100.000	90.000	200.000	135.000	155.000
[225]	475.000	1450.000	150.000	105.000	350.000	90.000	530.000	341.667
[233]	940.000	350.000	326.667	250.000	740.000	425.000	925.000	185.000
[241]	920.000	286.667	245.000	235.000	1150.000	160.000	425.000	900.000
[249]	500.000	277.500	750.000	160.000	1300.000	525.000	550.000	1600.000
[257]	120.000	165.000	700.000	875.000	385.000	960.000	1000.000	

\$W

34	0.1597651510	-0.0978344737	0.0666219555	0.074254368	0.0053963670
35	0.0034725346	0.0694349693	0.0184133204	0.004350234	-0.0083120428
36	0.2129167063	-0.1332856108	0.0001713508	0.061936658	0.0159128243
37	-0.1288833048	0.0975808547	-0.0376077247	-0.040105351	-0.0172468562
38	-0.0483763609	-0.0106578687	-0.0399249996	0.040072080	-0.0196060685
39	0.2034936978	-0.1461769334	0.0666219555	0.067615042	0.0095458710
40	-0.2092779395	0.1422325309	-0.0463126147	-0.069227379	-0.0148450878
41	0.0115065002	-0.0106578687	-0.0278225091	0.028111675	-0.0139178433
42	0.0103366071	-0.0078253324	-0.0469777090	0.013802682	0.0011581008
43	0.1703458686	-0.1300627802	-0.0083745008	0.074254368	0.0039988794
44	0.0981539563	-0.0661326416	0.0229312271	0.061641223	0.0141642061
45	-0.2539209643	0.1607604647	-0.0434352913	-0.130332471	-0.0028028437
46	0.0034725346	0.0254814660	-0.0438907215	0.001567321	-0.0179463648
47	0.2629515341	-0.1751824093	0.0229312271	0.089392867	0.0012166250
48	0.1790197130	-0.1365084415	0.0840493831	0.077576883	-0.0099048596
49	0.2013445605	-0.1461769334	0.0761294350	0.064190391	-0.0099048596
50	-0.2018374354	0.0838248328	-0.0403365883	-0.113368643	0.0097854604
51	0.2188199505	-0.1461769334	0.0314110038	0.070929904	-0.0001735606
52	-0.1226647223	0.0900713425	-0.0458181282	-0.028838809	0.0021439530
53	0.1011190749	-0.0581211399	0.0553048017	0.040072080	0.0114595254
54	-0.1117536067	0.0677320112	-0.0429821918	-0.034415326	0.0116986248
55	-0.1064173682	0.0448241951	-0.0415131828	-0.062439483	0.0011581008
56	-0.1326868527	0.0795799726	-0.0429821918	-0.089591069	0.0126554938
57	-0.0047140003	0.0367583321	0.0229312271	0.004350234	-0.0013190329
58	0.0518031827	-0.0194577160	0.0439446168	0.005777425	0.0095458710
59	0.0197679180	-0.0046606267	-0.0426845419	-0.002523143	-0.0039344523
60	0.0648288250	-0.0219036446	0.0439446168	0.056882266	0.0095458710
61	0.1588058226	-0.0913779314	0.0184133204	0.013802682	0.0146273423
62	-0.3159251655	0.2862224176	-0.0403365883	-0.194558663	0.0280136567
63	-0.2377998721	0.1319640051	-0.0415131828	-0.099774639	-0.0008179476
64	0.0778216875	-0.0533360324	-0.0083745008	0.009035407	0.0107941424
65	-0.2663218046	0.1545920584	-0.0403365883	-0.099774639	0.0308973050
66	0.1347907032	-0.0556911509	-0.0458527053	0.031789863	0.0017992221
67	0.2629515341	-0.1848509012	-0.0278225091	0.089392867	0.0095458710
68	-0.0497522580	0.0273508645	-0.0376077247	-0.028838809	-0.0145943464
69	0.0970103480	-0.0533360324	-0.0376077247	0.050428700	-0.0013190329
70	-0.0716496994	0.0479098358	-0.0425218669	-0.055652259	0.0088363322
71	0.0928653046	-0.0661326416	0.0184133204	0.061729192	0.0146273423
72	-0.1107399731	0.0815401363	-0.0434352913	-0.055652259	0.0116986248
73	0.0237862257	0.0367583321	-0.0376077247	0.006054224	-0.0153452356
74	-0.1770349712	0.1017207056	-0.0438907215	-0.103172588	0.0193648588
75	0.0045284471	0.0290484456	-0.0425218669	-0.126940773	-0.0161765357
76	-0.0047140003	0.0182688538	-0.0426845419	-0.037301336	-0.0039344523
77	-0.0949760841	0.1078859086	-0.0473338215	-0.013262197	0.0001858730
78	0.1823428473	-0.1590682560	0.0666219555	0.043727880	0.0012166250

79	-0.1782753871	0.1139822463	-0.0448309839	-0.055652259	0.0001858730
80	-0.2712821407	0.2039463547	-0.0403365883	-0.140501346	0.0232075763
81	0.2024033317	-0.1526225947	0.0439446168	0.093435025	-0.0057343029
82	-0.0266289128	0.0615286251	-0.0458527053	-0.037301336	-0.0133248936
83	0.0827149008	-0.0715778267	-0.0458527053	0.061126828	-0.0130628349
84	-0.0895250358	0.0537570658	-0.0438907215	-0.072621327	0.0203252654
85	-0.1881965112	0.1099273896	-0.0403365883	-0.106572016	0.0164875791
86	-0.2154783597	0.1484262210	-0.0382612523	-0.106572016	0.0232075763
87	-0.0680447422	0.0342265419	-0.0278225091	-0.021080213	-0.0144848924
88	0.1320288850	-0.0688718135	-0.0399249996	0.028111675	-0.0039344523
89	0.0088147862	-0.0273582454	0.0439446168	0.040072080	0.0113350062
90	0.0803474064	-0.0485008280	0.0553048017	0.067615042	0.0062469868
91	0.0340923095	-0.0219036446	-0.0453229454	0.013802682	-0.0013190329
92	0.0486393936	-0.0688718135	-0.0458527053	0.059728655	-0.0145802649
93	-0.1447856672	0.0838248328	0.0314110038	-0.113368643	-0.0153452356
94	0.0638606049	-0.0509141114	-0.0205630261	-0.017923618	0.0168657975
95	-0.1095175914	0.0564955769	0.0666219555	0.040072080	0.0062469868
96	0.1328818905	-0.0661326416	-0.0376077247	0.056882266	-0.0114354319
97	0.0253966559	0.0391559800	0.0314110038	0.006054224	-0.0114354319
98	-0.2005973514	0.1219471442	-0.0426845419	-0.037301336	0.0001858730
99	-0.1832361751	0.1442981996	-0.0453229454	-0.042940012	0.0040906670
100	0.1076185401	-0.0009904581	-0.0399249996	0.009035407	-0.0153452356
101	0.1968623468	-0.1429541028	-0.0149888816	0.067615042	0.0107941424
102	0.1363394381	-0.0913779314	0.0184133204	0.087488967	0.0090289397
103	-0.0319500682	-0.0152990363	0.0761294350	0.024715820	0.0026068105
104	0.2751756908	-0.1912965625	0.0314110038	0.095559194	0.0114595254
105	0.2327372667	-0.1880737319	0.0439446168	0.085690055	-0.0154656018
106	-0.2067977715	0.1463707189	-0.0341348837	-0.160789157	0.0232075763
107	0.0606588349	-0.0046606267	0.0229312271	0.018002051	0.0113350062
108	-0.0227376453	-0.0046606267	0.0666219555	-0.025506951	0.0159128243
109	-0.2204386957	0.0935662467	-0.0389489804	-0.086197121	0.0318585211
110	-0.2985639891	0.2080612116	-0.0415131828	-0.164162997	0.0357033854
111	0.1834802775	-0.1397312721	-0.0083745008	0.061936658	0.0012166250
112	-0.0768700340	0.0713913633	-0.0149888816	0.018002051	-0.0148450878
113	-0.1313709276	0.0694349693	-0.0453229454	-0.013262197	-0.0117221725
114	0.2578731220	-0.1912965625	0.0001713508	0.095559194	0.0136903621
115	-0.2191986117	0.1730981644	-0.0149888816	-0.069227379	-0.0117221725
116	-0.0972020203	0.0773436433	0.0184133204	0.001567321	0.0091109020
117	0.2077680044	-0.0913779314	-0.0376077247	0.061641223	-0.0114354319
118	0.2670191528	-0.1848509012	0.0439446168	0.080350887	-0.0015637462
119	0.1363394381	-0.0465062712	0.0439446168	0.061126828	0.0091109020
120	0.0629335144	-0.0246871169	0.0229312271	0.018002051	0.0138073799
121	-0.1423882429	0.0996560123	-0.0443516360	0.001567321	0.0040906670
122	0.0139197548	-0.0078253324	0.0553048017	0.005220388	0.0160584910
123	0.1037975674	-0.0273582454	0.0314110038	0.056882266	0.0159128243

124	-0.2402800401	0.1319640051	-0.0425218669	-0.079409224	0.0222458607
125	-0.1943969313	0.1545920584	0.0184133204	-0.028838809	-0.0059387029
126	0.2528185016	-0.1912965625	0.0666219555	0.106712700	-0.0182459729
127	-0.2427602081	0.2080612116	-0.0458181282	-0.130332471	0.0251300084
128	0.1568168985	-0.1042801350	0.0314110038	0.064190391	0.0053963670
129	0.0956062233	-0.0715778267	-0.0376077247	0.061729192	-0.0181782400
130	-0.2092779395	0.1199747848	-0.0458527053	-0.103172588	-0.0059387029
131	0.0109354115	-0.0325099663	-0.0205630261	0.006054224	-0.0083120428
132	0.0956062233	-0.0813880370	0.0314110038	0.085690055	0.0090289397
133	-0.0110250464	-0.0355069079	-0.0278225091	0.043727880	0.0138073799
134	-0.0425661539	-0.0106578687	0.0553048017	0.024715820	0.0113446095
135	0.2337317310	-0.1655139173	0.0314110038	0.091354542	0.0081791887
136	-0.2092779395	0.1751544112	-0.0458181282	-0.079409224	-0.0048317801
137	0.2367218119	-0.1300627802	0.0229312271	0.061936658	0.0012166250
138	-0.0266289128	0.0342265419	-0.0420416760	-0.082803172	0.0021439530
139	-0.0895250358	0.1058399862	-0.0453229454	-0.034415326	-0.0153452356
140	-0.1596705944	0.1484262210	-0.0376077247	-0.116764778	-0.0008179476
141	-0.1584303228	0.0996560123	-0.0415131828	-0.086197121	0.0069411516
142	0.1320288850	-0.0781067518	0.0439446168	0.061936658	0.0095458710
143	-0.1708334887	0.1279353742	-0.0429821918	-0.099774639	0.0116986248
144	0.0790561832	-0.0355069079	-0.0278225091	0.006956756	0.0113446095
145	-0.2030775194	0.1239317948	-0.0278225091	-0.042940012	-0.0048317801
146	-0.1026845786	0.0773436433	0.0314110038	-0.017923618	-0.0062646785
147	0.0593796634	-0.0485008280	-0.0438907215	-0.034415326	-0.0195609782
148	-0.3196454175	0.2553693100	-0.0403365883	-0.201313255	0.0116986248
149	0.1356829132	-0.1107257963	0.0840493831	0.064190391	0.0053963670
150	-0.0823176482	0.0589995414	-0.0458181282	-0.027211492	-0.0194817275
151	-0.0136094679	0.0589995414	0.0001713508	-0.059045534	0.0017992221
152	0.1320288850	-0.0913779314	0.0001713508	0.061126828	0.0090289397
153	-0.0905679842	0.0882556438	-0.0205630261	-0.059045534	-0.0039344523
154	0.2188199505	-0.1493997641	-0.0083745008	0.080350887	0.0081791887
155	-0.2067977715	0.1037822871	-0.0453229454	-0.099774639	0.0021439530
156	0.0803474064	-0.0509141114	-0.0448309839	0.006121188	-0.0194767736
157	-0.0575704800	0.0615286251	-0.0420416760	-0.028838809	0.0097854604
158	0.0658855384	-0.0325099663	-0.0469777090	0.040072080	-0.0181782400
159	-0.2005973514	0.1199747848	-0.0458181282	-0.120158937	-0.0133248936
160	0.2013445605	-0.1429541028	0.0666219555	0.077576883	0.0039988794
161	-0.2514407963	0.1648727759	0.0439446168	-0.116764778	-0.0181782400
162	-0.0884511609	0.0677320112	-0.0463126147	-0.059045534	-0.0145802649
163	0.2088397505	-0.1365084415	-0.0278225091	0.087488967	0.0113350062
164	0.0093109500	-0.0298428296	0.0001713508	0.021349392	0.0114595254
165	-0.0895250358	0.1017207056	-0.0399249996	-0.023402461	-0.0059387029
166	-0.0279785370	0.0677320112	-0.0469777090	-0.031547160	-0.0071563182
167	0.1272499270	-0.1075029656	0.0001713508	0.067615042	0.0113350062
168	0.2088397505	-0.1429541028	0.0553048017	0.082399350	-0.0112950451

169	0.1113097292	-0.0880121741	0.0553048017	0.095559194	0.0114595254
170	0.0767148145	-0.0688718135	-0.0463126147	0.021349392	-0.0139178433
171	-0.1035576482	0.0391559800	-0.0420416760	-0.040105351	-0.0161765357
172	0.1557185095	-0.1236171189	0.0001713508	0.074254368	0.0168657975
173	0.4005824630	-0.3137641272	0.0840493831	0.136025979	-0.0307576430
174	0.0304576521	-0.0273582454	0.0314110038	0.059728655	0.0053963670
175	0.2067142330	-0.1784052399	-0.0149888816	0.080350887	0.0146273423
176	0.1157437780	-0.0748148124	0.0229312271	0.053902623	0.0012166250
177	-0.1906766792	0.1401684804	0.0001713508	-0.099774639	-0.0083120428
178	0.0246310865	0.0182688538	-0.0083745008	-0.013262197	0.0017992221
179	0.1272499270	-0.0715778267	0.0184133204	0.061936658	0.0090289397
180	0.0348846678	-0.0298428296	-0.0083745008	0.035781487	0.0138073799
181	-0.1547092694	0.0795799726	0.0666219555	0.001567321	-0.0039344523
182	-0.1857163431	0.1099273896	-0.0469777090	-0.154042623	-0.0083120428
183	-0.1136375211	0.0935662467	0.0840493831	-0.028838809	-0.0144848924
184	0.0435777602	-0.0607485842	-0.0426845419	0.028111675	-0.0062646785
185	-0.1288833048	0.1319640051	-0.0278225091	-0.096379142	-0.0095409325
186	0.0981539563	-0.0533360324	-0.0083745008	0.035781487	0.0141642061
187	-0.1460263028	0.0748924222	-0.0409512430	-0.076015276	0.0040906670
188	-0.0216051125	0.0479098358	-0.0083745008	-0.017923618	-0.0145802649
189	0.1779741490	-0.1493997641	0.0840493831	0.102202965	0.0039988794
190	0.1790197130	-0.1365084415	0.0229312271	0.043727880	-0.0043441173
191	-0.0689901710	0.1139822463	0.0229312271	-0.013262197	-0.0062646785
192	0.1037975674	-0.0846769729	0.0840493831	0.061126828	0.0136903621
193	0.1427675339	-0.0688718135	0.0314110038	0.061729192	0.0095458710
194	0.0455460829	-0.0219036446	0.0184133204	0.009035407	0.0017992221
195	0.2013445605	-0.1365084415	0.0439446168	0.087488967	-0.0057343029
196	0.1578181033	-0.0913779314	-0.0376077247	0.040072080	0.0113350062
197	-0.0600934445	0.0124860035	-0.0389489804	-0.052381549	0.0021439530
198	0.0803474064	-0.0978344737	-0.0376077247	0.040072080	0.0095458710
199	0.0629335144	0.0182688538	-0.0083745008	0.028111675	-0.0083120428
200	-0.2303593679	0.1259333443	-0.0420416760	-0.238463513	-0.0117221725
201	0.0006190481	-0.0106578687	-0.0469777090	-0.025506951	-0.0153452356
202	0.0287331225	-0.0556911509	-0.0453229454	0.040072080	-0.0181782400
203	-0.0847326327	0.0955485425	-0.0205630261	0.006956756	-0.0085392402
204	0.1682132908	-0.0715778267	0.0314110038	0.061729192	0.0107941424
205	0.2129167063	-0.1493997641	0.0001713508	0.064190391	0.0067890215
206	0.0550013422	-0.0378710710	-0.0205630261	0.009035407	0.0017992221
207	-0.1250194715	0.0748924222	0.0001713508	0.006376074	0.0062469868
208	0.0995603475	-0.0978344737	0.0666219555	0.061641223	-0.0001735606
209	-0.0960597420	0.0367583321	0.0001713508	0.004350234	0.0168657975
210	0.2925083341	-0.2299705303	0.0553048017	0.117987038	-0.0168557874
211	0.1388911257	-0.0978344737	0.0314110038	0.040072080	0.0138073799
212	-0.2539209643	0.1628166200	-0.0399249996	-0.031547160	-0.0085392402
213	0.0165194629	-0.0465062712	0.0761294350	0.053902623	0.0081791887

214	0.2099310428	-0.1332856108	0.0001713508	0.061641223	0.0039988794
215	0.0237862257	-0.0106578687	-0.0458527053	0.009035407	-0.0145802649
216	-0.0509388863	0.0254814660	-0.0458181282	-0.002523143	-0.0145943464
217	-0.1571900365	0.1037822871	0.0184133204	-0.046074034	-0.0039344523
218	0.1272499270	-0.1139486269	0.0553048017	0.082399350	0.0168657975
219	-0.1238607513	0.1319640051	-0.0083745008	-0.076015276	-0.0013190329
220	-0.1117536067	0.0322895772	-0.0415131828	0.006054224	0.0040906670
221	0.1968623468	-0.1042801350	0.0314110038	0.091354542	0.0081791887
222	-0.1238607513	0.0860452983	-0.0458527053	-0.046074034	-0.0071563182
223	-0.0535011951	0.0231349377	-0.0469777090	0.006054224	-0.0144848924
224	-0.1968770993	0.0955485425	-0.0473338215	-0.027211492	-0.0185003462
225	-0.1338584038	0.1239317948	0.0553048017	-0.076015276	-0.0095409325
226	-0.1671126910	0.0900713425	-0.0453229454	0.001567321	-0.0028028437
227	-0.0239399812	-0.0219036446	0.0840493831	0.031789863	0.0113350062
228	-0.0425661539	-0.0046606267	0.0001713508	0.006121188	0.0168657975
229	-0.1313709276	0.0448241951	0.0761294350	-0.028838809	0.0017992221
230	-0.2613614685	0.2286299500	0.0229312271	-0.106572016	-0.0144331001
231	-0.1733141022	0.1442981996	-0.0473338215	-0.096379142	-0.0133248936
232	0.1338861521	-0.0715778267	0.0553048017	0.040072080	0.0039988794
233	-0.2117581076	0.1099273896	-0.0443516360	-0.034415326	-0.0100913970
234	-0.3283260057	0.2348005715	-0.0149888816	-0.106572016	-0.0194817275
235	0.0356904821	-0.0046606267	0.0553048017	0.018002051	0.0081791887
236	0.1506751198	-0.0913779314	0.0761294350	0.080350887	0.0012166250
237	-0.2725222247	0.2306868239	-0.0399249996	-0.160789157	-0.0165344800
238	0.1486295441	-0.0978344737	0.0001713508	0.080350887	0.0114595254
239	-0.1695932493	0.0882556438	0.0666219555	0.018002051	-0.0190651087
240	-0.1213913096	0.0391559800	-0.0473338215	0.006121188	0.0062469868
241	0.4016020303	-0.3040956353	0.0761294350	0.131516244	-0.0265870863
242	0.2129167063	-0.1784052399	0.0666219555	0.084046774	-0.0071244884
243	0.2247770733	-0.1655139173	-0.0149888816	0.089392867	0.0095458710
244	0.2045709951	-0.1203942882	0.0439446168	0.097732937	-0.0001735606
245	-0.1095175914	0.0996560123	-0.0149888816	0.005220388	-0.0130628349
246	-0.1931568473	0.0815401363	0.0761294350	0.005220388	-0.0165344800
247	-0.0266289128	0.0254814660	0.0314110038	-0.055652259	-0.0130628349
248	0.2457566844	-0.1816280706	0.0553048017	0.097732937	-0.0112950451
249	0.2914887669	-0.2138563771	0.0439446168	0.104457833	0.0039988794
250	0.1356829132	-0.0946116430	0.0439446168	0.061729192	0.0136903621
251	-0.0779198432	0.0231349377	-0.0469777090	0.009035407	-0.0161765357
252	-0.2204386957	0.0838248328	0.0840493831	-0.116764778	0.0095458710
253	-0.2328395360	0.1792671343	-0.0463126147	-0.160789157	0.0136131379
254	0.0425158523	-0.0581211399	0.0314110038	0.056882266	0.0062469868
255	0.0205245382	0.0508580541	0.0761294350	-0.028838809	0.0067890215
256	-0.1956370153	0.2224593285	0.0001713508	-0.160789157	-0.0161765357
257	0.0088147862	0.0322895772	-0.0205630261	-0.027211492	0.0141642061
258	-0.2117581076	0.1504801929	-0.0448309839	-0.076015276	0.0155292929

259	-0.0972020203	0.0589995414	0.0184133204	-0.025506951	-0.0062646785
260	-0.0918224212	0.0773436433	0.0314110038	-0.055652259	-0.0095409325
261	-0.0716496994	0.0564955769	0.0553048017	-0.013262197	0.0113446095
262	-0.1869564271	0.0935662467	-0.0083745008	-0.086197121	-0.0181782400
263	-0.2588813004	0.1463707189	-0.0083745008	-0.059045534	0.0062469868
	Walks	Years	CAtBat	CHits	CHmRun
1	1.192389e-02	-0.251876815	-0.399937891	0.108107430	0.019214929
2	2.668302e-05	0.166146535	0.540733564	-0.212819571	0.021561479
3	6.917445e-03	-0.134583059	-1.554636101	0.632089640	-0.123361125
4	1.379837e-03	0.208647486	1.173491880	-0.454126409	0.032059933
5	4.008062e-03	-0.134583059	-0.908196428	0.325652794	0.038815264
6	-1.414555e-02	0.208647486	1.265897822	-0.489929619	0.018480433
7	-3.974835e-02	0.166146535	1.116199800	-0.449853506	0.017277432
8	-3.795870e-02	0.208647486	1.201412804	-0.463266465	0.024507885
9	1.209324e-02	-0.212938511	-1.331152953	0.463935911	-0.148375941
10	1.894884e-02	-0.094781204	-1.026342465	0.441754480	-0.001900018
11	-4.823049e-03	-0.062289802	0.409811336	-0.204748679	0.036471998
12	2.223838e-02	0.124765465	0.601159792	-0.260760286	0.034082278
13	-1.241292e-02	0.041977601	0.376659058	-0.169357769	0.022046963
14	1.379837e-03	-0.212938511	-0.284852234	0.099915078	0.036420006
15	3.370612e-03	-0.290860755	-2.853148178	1.115747012	-0.080476499
16	-2.475302e-02	0.083010563	1.131394495	-0.453515212	0.023263812
17	-2.677407e-02	-0.030603159	1.005554393	-0.406018640	0.037697432
18	1.209324e-02	0.247444332	1.164864928	-0.459615504	0.037943219
19	1.533634e-02	0.247444332	1.158269776	-0.449242965	0.020862055
20	2.263388e-03	0.041977601	0.385282028	-0.186761303	0.020059283
21	1.177450e-02	-0.411468371	-3.045952495	1.248207076	-0.068858248
22	6.659600e-03	0.041977601	-0.005321284	0.034009525	0.038514293
23	-1.241292e-02	0.008490398	0.381966660	-0.185224748	0.033428344
24	1.177450e-02	-0.094781204	0.177558693	-0.091811134	0.022603200
25	-5.761757e-03	0.083010563	0.189546538	-0.066684281	0.036484554
26	-1.671968e-02	-0.251876815	-1.328509416	0.498551067	-0.070646489
27	-1.241292e-02	0.166146535	1.074639805	-0.424824792	0.026994357
28	2.274581e-02	0.083010563	0.529149227	-0.217108430	0.037741185
29	-3.069531e-02	0.008490398	0.710340773	-0.319557173	0.039405898
30	1.379837e-03	-0.251876815	-1.860819485	0.861298867	-0.052768635
31	-2.475302e-02	0.208647486	1.196843540	-0.468126621	0.023263812
32	4.579524e-03	0.208647486	1.256757771	-0.485087931	0.022046963
33	-3.616906e-02	0.124765465	1.022341005	-0.418075669	0.036484554
34	-1.241292e-02	0.041977601	0.870113363	-0.368722423	0.038436372
35	4.579524e-03	0.166146535	0.903515979	-0.345399155	0.037697432
36	-3.616906e-02	0.083010563	0.990921005	-0.398722745	0.036484554
37	-9.339332e-03	0.041977601	0.018295444	0.006274895	0.014516303
38	-1.241292e-02	-0.370397187	-2.027188574	0.765001013	-0.173392791
39	-1.138027e-02	0.208647486	1.259804512	-0.479639996	0.019677695

40	1.192389e-02	-0.062289802	-0.945279007	0.446604291	-0.023270011
41	1.192389e-02	-0.173835279	-1.301470867	0.531075559	-0.070646489
42	-1.571934e-02	0.041977601	0.894873445	-0.372400143	0.039626616
43	4.008062e-03	0.124765465	0.696750968	-0.301141175	0.033717836
44	-3.069531e-02	-0.173835279	-0.55215881	0.207931236	0.036783457
45	6.659600e-03	0.041977601	-0.273598656	0.176928357	-0.041147628
46	-2.275605e-02	0.247444332	1.163343181	-0.446800272	0.037697432
47	-2.475302e-02	-0.330388465	-2.085551384	0.672920625	-0.009867235
48	-3.256115e-02	0.124765465	0.811501849	-0.347137461	0.018480433
49	-1.241292e-02	0.124765465	0.906384936	-0.386319385	0.028221889
50	1.533634e-02	-0.370397187	-2.572794968	0.913970211	-0.203772748
51	-1.414555e-02	0.166146535	1.113665593	-0.442524164	0.026994357
52	1.800875e-02	0.124765465	0.961615489	-0.389968749	0.038066645
53	-7.684784e-03	-0.370397187	-2.950091921	1.063733897	-0.011652873
54	2.445165e-02	-0.251876815	-1.405905462	0.508922418	-0.119787714
55	-1.795872e-02	-0.411468371	-2.687759160	0.889711673	-0.232365954
56	-2.539297e-02	-0.290860755	-2.101484809	0.777465467	-0.182327844
57	-2.876493e-02	-0.062289802	-0.507104929	0.264440204	0.036484554
58	1.192389e-02	0.124765465	0.737247527	-0.287347218	0.037943219
59	1.192389e-02	0.041977601	0.257597553	-0.132318851	0.011016181
60	-1.138027e-02	0.124765465	0.837403224	-0.332783753	0.030761337
61	1.352443e-02	-0.290860755	-1.915871215	0.691606933	-0.059920072
62	2.429347e-02	0.083010563	0.232536385	0.025275679	-0.005376549
63	1.149177e-03	-0.134583059	-1.230940739	0.502691254	-0.159990761
64	2.274581e-02	-0.062289802	-0.600756682	0.192830130	-0.051874386
65	2.274581e-02	-0.251876815	-2.136519273	0.943082915	-0.143015416
66	2.223838e-02	0.208647486	1.157254000	-0.446800272	0.037946663
67	-1.241292e-02	-0.330388465	-1.438693812	0.468106088	-0.084051163
68	2.357902e-02	0.124765465	0.688926563	-0.326862025	0.039909961
69	-2.275605e-02	0.083010563	0.631095791	-0.251453964	0.039909961
70	4.475480e-03	0.124765465	0.443849300	-0.201933178	-0.018801314
71	3.626091e-03	0.247444332	1.213598388	-0.468126621	0.025753655
72	1.642814e-02	0.166146535	1.074133912	-0.415645236	0.039909961
73	4.830654e-03	-0.173835279	0.278578698	-0.100344211	0.034082278
74	-1.109025e-03	-0.251876815	-2.434581786	0.983986856	-0.194837372
75	8.836014e-03	0.166146535	1.013698814	-0.403666573	0.037872848
76	4.830654e-03	0.008490398	0.279846645	-0.140955637	0.034612232
77	-2.255876e-03	-0.094781204	-1.552469263	0.704065350	-0.168031874
78	-1.896963e-02	-0.030603159	0.688926563	-0.298843058	0.025753655
79	1.352443e-02	-0.251876815	-1.804220459	0.637628600	-0.039359618
80	1.171608e-02	0.083010563	0.280323134	-0.086670734	-0.004201294
81	-3.256115e-02	0.247444332	1.265390042	-0.484482721	0.022046963
82	-4.581771e-03	-0.251876815	-2.108900620	0.992306514	-0.109067388
83	6.917445e-03	0.083010563	0.604438280	-0.288648650	0.018211575
84	1.533634e-02	-0.212938511	-1.784619630	0.681225790	-0.164458075

85	1.317876e-02	0.166146535	0.877137581	-0.354122387	0.028038088
86	2.445165e-02	0.041977601	-0.091129900	0.017600087	-0.017907392
87	1.379837e-03	0.124765465	0.972473793	-0.401879365	0.034923976
88	-7.684784e-03	-0.330388465	-2.196564702	0.864070810	-0.153736598
89	1.101578e-02	-0.062289802	-0.465783100	0.130237872	0.023492106
90	-1.571934e-02	-0.030603159	0.275143305	-0.122040231	0.037943219
91	1.758806e-02	-0.290860755	-2.274196825	0.907039196	-0.128721265
92	1.171608e-02	-0.495644720	-3.204095361	1.045702684	-0.265426849
93	7.742267e-03	0.083010563	0.624473576	-0.276387164	0.032059933
94	2.223838e-02	0.083010563	0.598896698	-0.271652009	0.036192957
95	4.008062e-03	-0.134583059	-1.519671274	0.634169683	0.037741185
96	-1.178424e-04	0.083010563	0.527691252	-0.216190227	0.017323111
97	2.429147e-03	-0.030603159	-0.225095854	0.155950239	-0.004201294
98	1.234860e-02	0.083010563	0.163771806	-0.063863430	0.023698743
99	1.008404e-02	0.008490398	-0.561605020	0.286292290	-0.047404618
100	-9.287369e-03	0.008490398	-0.139009211	0.097574951	0.025872521
101	2.429147e-03	0.083010563	0.775478470	-0.326226438	0.033457343
102	-1.896963e-02	-0.411468371	-2.380742018	0.982597766	-0.092092872
103	-1.178424e-04	0.124765465	1.060952224	-0.437034754	0.018480433
104	-2.475302e-02	-0.062289802	1.050300969	-0.423600485	0.037943219
105	-1.896963e-02	0.166146535	1.108595822	-0.439474640	0.025753655
106	7.742267e-03	0.041977601	0.180880101	-0.065643301	-0.036677839
107	1.177450e-02	-0.290860755	-0.871112617	0.367437726	0.018819637
108	5.569611e-03	0.208647486	1.151165626	-0.452904288	0.019677695
109	1.209324e-02	0.208647486	1.021329451	-0.410195628	0.034612232
110	3.626091e-03	0.124765465	0.636380975	-0.251928953	0.024314995
111	1.800875e-02	-0.173835279	-0.906601975	0.381330671	-0.095666957
112	2.351667e-02	-0.370397187	-2.533304981	1.028366597	-0.059026972
113	1.171608e-02	0.041977601	0.021807683	-0.033311412	-0.009059418
114	-1.241292e-02	-0.251876815	0.281018957	-0.142071033	0.025246543
115	3.626091e-03	0.083010563	0.101630405	0.006274895	0.039405898
116	-7.684784e-03	-0.134583059	-0.623465608	0.278617368	0.033457343
117	-2.318445e-03	-0.290860755	-0.713179143	0.323492373	-0.009059418
118	-1.728985e-02	0.208647486	1.228323014	-0.474190065	0.028221889
119	1.800875e-02	0.247444332	1.233400541	-0.463266465	0.022046963
120	-1.571934e-02	-0.094781204	-0.144212649	0.086303940	0.009766238
121	2.223838e-02	-0.094781204	-0.030339528	0.019281107	-0.009059418
122	4.599152e-03	0.083010563	1.034540589	-0.413823475	0.022046963
123	-7.684784e-03	-0.212938511	-1.019460378	0.462543712	0.024314995
124	3.626091e-03	0.166146535	0.641845916	-0.270930015	0.020987841
125	2.044622e-02	0.041977601	-0.191117714	0.141133859	0.036484554
126	-2.275605e-02	0.166146535	1.275037869	-0.488719197	0.019677695
127	1.533634e-02	-0.212938511	-2.349305597	1.039461284	-0.235940105
128	3.626091e-03	-0.251876815	-0.644110796	0.216467977	0.036424856
129	-9.287369e-03	0.166146535	1.054870373	-0.423600485	0.037697432

130	-7.684784e-03	0.124765465	0.336241302	-0.143939715	0.029340015
131	-1.896963e-02	0.041977601	0.686687664	-0.306939963	0.039023120
132	-2.275605e-02	0.124765465	1.146094465	-0.449853506	0.024507885
133	2.177627e-02	-0.212938511	-1.534475447	0.508922418	0.007442424
134	1.642814e-02	0.166146535	0.895689463	-0.380809684	0.024507885
135	-1.896963e-02	-0.134583059	-0.335832167	0.148541760	0.016639647
136	1.008404e-02	0.083010563	0.506853254	-0.208866366	0.033457343
137	-1.241292e-02	0.247444332	1.282654574	-0.480245455	0.024507885
138	8.836014e-03	-0.030603159	-0.019582339	0.036698895	-0.034889975
139	4.008062e-03	-0.251876815	-1.817963482	0.814869322	-0.030420781
140	-2.167584e-02	-0.212938511	-1.798926622	0.815560968	-0.036677839
141	5.569611e-03	0.041977601	-0.067014126	0.092176670	-0.026844831
142	-1.241292e-02	-0.094781204	-0.648858793	0.275792091	0.004755879
143	1.101578e-02	0.124765465	0.454978773	-0.202233973	0.020987841
144	4.579524e-03	0.208647486	1.200905088	-0.458398239	0.032059933
145	2.429347e-02	-0.062289802	-0.206239575	0.141133859	0.007442424
146	-8.142513e-03	-0.094781204	-0.386169247	0.209751833	0.038737854
147	-1.417796e-02	0.008490398	0.914007893	-0.383573715	0.021244592
148	4.599152e-03	0.166146535	0.383506396	-0.106195237	0.036783457
149	1.379837e-03	0.247444332	1.232892816	-0.476612904	0.017277432
150	9.926543e-03	0.008490398	-0.166352102	0.115154986	-0.025950978
151	2.044622e-02	0.208647486	1.036069312	-0.401879365	0.028221889
152	-4.823049e-03	-0.173835279	-0.945807408	0.387577353	-0.006447828
153	6.917445e-03	-0.290860755	-0.846218993	0.400075375	0.006383069
154	-1.414555e-02	0.041977601	0.966581032	-0.399299909	0.039023120
155	1.317876e-02	0.008490398	-0.457596035	0.177525626	-0.013439635
156	1.008404e-02	-0.094781204	-0.836679972	0.318584050	-0.111747619
157	2.445165e-02	-0.212938511	-1.660853917	0.616170376	-0.109960912
158	-1.414555e-02	0.166146535	1.028441201	-0.403105803	0.036420006
159	1.424866e-02	-0.094781204	-1.065021175	0.455613564	-0.005376549
160	4.579524e-03	0.247444332	1.264882279	-0.482666957	0.019677695
161	1.209324e-02	0.083010563	0.503056358	-0.197713241	0.032059933
162	4.599152e-03	0.008490398	0.320352841	-0.136858064	0.021931594
163	-1.728985e-02	0.208647486	1.264882279	-0.480245455	0.032059933
164	1.379837e-03	0.208647486	0.885279086	-0.373165821	0.034923976
165	2.421356e-02	-0.212938511	-0.373971486	0.231648952	-0.023270011
166	4.579524e-03	0.041977601	0.653266229	-0.256444120	0.035941288
167	-4.823049e-03	-0.062289802	-0.066653717	-0.008855732	0.025872521
168	-3.069531e-02	0.247444332	1.268436724	-0.482666957	0.020862055
169	4.830654e-03	0.166146535	1.199889820	-0.469341610	0.020862055
170	-4.823049e-03	0.041977601	0.383506396	-0.164267053	-0.001900018
171	2.402922e-02	0.166146535	0.826731355	-0.354792199	0.026842844
172	-1.896963e-02	0.166146535	1.050810613	-0.412009107	0.038514293
173	-5.227588e-02	0.208647486	1.353743825	-0.509901578	0.019677695
174	1.533634e-02	0.008490398	0.362823974	-0.161502568	0.038534008

175	1.192389e-02	0.166146535	1.121769873	-0.444964375	0.034923976
176	-7.684784e-03	0.166146535	1.080216907	-0.418075669	0.026994357
177	2.177627e-02	0.124765465	0.958111020	-0.371528232	0.038815264
178	3.626091e-03	0.008490398	-0.171219810	0.107182311	0.033457343
179	-2.475302e-02	0.124765465	0.530172824	-0.249421895	0.037943219
180	2.421356e-02	0.083010563	0.737247527	-0.308309924	0.026842844
181	-3.069531e-02	0.208647486	0.850551572	-0.346579500	0.020862055
182	1.209324e-02	0.208647486	0.880696868	-0.361137679	0.036420006
183	-3.411749e-03	-0.062289802	-1.083561798	0.350726898	0.033428344
184	1.424866e-02	0.008490398	0.611453749	-0.283111319	0.022603200
185	-1.109025e-03	0.124765465	0.577020158	-0.202233973	0.034612232
186	1.379837e-03	-0.251876815	-1.690500068	0.609941256	-0.015226686
187	2.351667e-02	0.247444332	1.100489197	-0.433374074	0.039023120
188	1.177450e-02	-0.062289802	-0.765715931	0.374386039	0.012213517
189	1.379837e-03	-0.663869978	-6.094535357	2.490973754	-0.065282999
190	-1.414555e-02	0.083010563	0.737749392	-0.304020306	0.037697432
191	-1.178424e-04	0.041977601	0.363888265	-0.123449324	0.039626616
192	-7.684784e-03	0.083010563	1.194812863	-0.465698193	0.017277432
193	4.579524e-03	-0.173835279	-1.186396557	0.481958226	0.034848550
194	1.192389e-02	0.083010563	0.665213459	-0.293224311	0.037116473
195	-2.475302e-02	-0.173835279	-0.056800174	-0.038733780	0.037116473
196	1.557976e-02	-0.330388465	-2.312539945	0.819027610	-0.201092135
197	4.475480e-03	0.166146535	1.043695658	-0.429097826	0.037741185
198	1.800875e-02	-0.411468371	-0.664697106	0.185947248	0.013409103
199	2.026704e-02	-0.062289802	0.177558693	-0.044740898	0.032208332
200	-1.548064e-02	-0.030603159	-0.729703343	0.359777303	-0.014333063
201	-1.919776e-02	-0.495644720	-3.643862511	1.280108453	-0.411967030
202	4.008062e-03	0.083010563	0.464850807	-0.249421895	-0.025057366
203	1.177450e-02	-0.134583059	-0.674277235	0.303843071	0.020059283
204	-2.876493e-02	0.041977601	0.913400283	-0.369903852	0.032059933
205	-2.080409e-02	-0.173835279	-1.292984759	0.457688049	0.025246543
206	1.352443e-02	-0.094781204	0.199613181	-0.083077418	0.037116473
207	2.445165e-02	-0.062289802	-0.357219685	0.152238386	0.033603197
208	-1.033732e-02	0.247444332	1.216137040	-0.474190065	0.019677695
209	-1.414555e-02	0.008490398	-0.352104497	0.142603034	0.036420006
210	-4.332764e-02	0.124765465	1.253203319	-0.485693142	0.020862055
211	1.642814e-02	0.041977601	0.889330738	-0.367574726	0.037943219
212	2.026704e-02	0.041977601	-0.239940963	0.157320705	0.016639647
213	4.830654e-03	0.124765465	0.824715746	-0.349225969	0.020862055
214	-1.896963e-02	0.166146535	1.043185616	-0.412009107	0.038514293
215	-1.241292e-02	0.247444332	1.180598290	-0.454126409	0.037943219
216	8.836014e-03	-0.173835279	-1.406409076	0.489563943	-0.060813576
217	1.234860e-02	0.247444332	1.095925540	-0.424824792	0.025753655
218	-2.275605e-02	-0.094781204	0.001118822	-0.036892559	0.034612232
219	1.533634e-02	-0.212938511	-2.301345958	0.939617110	-0.059026972

	CRuns	CRBI	CWalks	PutOuts	Assists
220	1.352443e-02	0.041977601	0.475206551	-0.246403868	-0.011652873
221	-2.876493e-02	0.166146535	1.227307505	-0.466911679	0.023263812
222	1.758806e-02	0.124765465	1.004025223	-0.403105803	0.038066645
223	4.008062e-03	0.208647486	1.029458615	-0.418075669	0.037697432
224	-1.414555e-02	0.208647486	0.953564378	-0.386319385	0.038436372
225	2.223838e-02	0.041977601	0.543390250	-0.235893849	0.030761337
226	-1.138027e-02	-0.411468371	-3.227383523	1.330734551	-0.164458075
227	1.209324e-02	0.124765465	1.013698814	-0.425426818	0.018480433
228	2.445165e-02	0.208647486	1.117211257	-0.440695060	0.026994357
229	2.467521e-02	0.124765465	0.492708804	-0.252723044	0.032059933
230	1.894884e-02	0.041977601	-0.200059594	0.134637697	0.038815264
231	2.429347e-02	-0.030603159	-0.258360903	0.112758874	0.022603200
232	-1.571934e-02	-0.030603159	0.013198521	-0.045406032	0.034848550
233	2.429347e-02	0.041977601	-0.041111028	-0.019668762	-0.041147628
234	-4.823049e-03	0.124765465	0.597666972	-0.219914830	0.036471998
235	2.402922e-02	-0.030603159	0.399141991	-0.183720915	0.028221889
236	1.379837e-03	0.124765465	0.925339471	-0.379792654	0.028221889
237	2.445165e-02	0.083010563	0.160791816	0.053890466	0.039405898
238	-1.178424e-04	0.008490398	0.695743223	-0.296635918	0.036484554
239	3.370612e-03	-0.030603159	-0.248466293	0.136527868	0.037943219
240	-1.414555e-02	0.124765465	0.905873007	-0.375064056	0.038066645
241	-5.048623e-02	0.247444332	1.364914993	-0.512927632	0.018480433
242	-1.571934e-02	0.008490398	0.942138450	-0.380300460	0.032059933
243	-1.033732e-02	0.041977601	0.800850188	-0.356781829	0.036192957
244	-4.690694e-02	-0.370397187	-0.724399140	0.334009460	0.007442424
245	2.429347e-02	0.008490398	-0.096265001	0.096996290	0.021561479
246	4.599152e-03	0.166146535	0.662464218	-0.284563081	0.025753655
247	2.668302e-05	0.083010563	0.582464322	-0.257250085	0.038514293
248	-2.475302e-02	-0.094781204	-0.737649445	0.337492826	0.024314995
249	-3.069531e-02	-0.453588405	-3.030788110	1.205209568	-0.138548445
250	3.626091e-03	0.124765465	0.683973137	-0.286018109	0.037650270
251	1.557976e-02	0.008490398	-0.179593267	0.054713190	-0.020588727
252	1.758806e-02	0.208647486	0.748797926	-0.318834585	0.018480433
253	2.263388e-03	0.041977601	-0.022205735	0.039284657	0.019214929
254	6.917445e-03	0.008490398	0.209691573	-0.123449324	0.034082278
255	4.830654e-03	0.008490398	0.462247618	-0.172763642	0.024507885
256	-3.530530e-02	0.083010563	-0.047603920	0.215730012	0.036484554
257	4.599152e-03	0.247444332	1.167401513	-0.444352839	0.030761337
258	2.177627e-02	0.247444332	1.073626930	-0.410802974	0.038066645
259	6.917445e-03	0.083010563	-0.009379522	0.084699835	0.036484554
260	-2.167584e-02	-0.173835279	-1.492677294	0.587806243	0.033603197
261	2.445165e-02	0.041977601	0.500909702	-0.230757962	0.025753655
262	-2.255876e-03	-0.030603159	-0.267337525	0.124169511	-0.009059418
263	2.429147e-03	-0.134583059	-1.173148699	0.550452423	0.039023120

1	-0.056533712	0.1394182093	-0.0343016384	0.0309149383	-0.0129975445
2	-0.243628827	-0.0789799070	-0.0248318676	0.0456294033	-0.0062934119
3	0.820408987	0.6720895848	-0.0322943182	-0.0148803049	-0.0177722164
4	-0.554852802	-0.3830969185	0.0676390853	0.0414003650	-0.0138425860
5	0.264314218	0.0256366672	-0.0173202448	0.0028030770	0.0651533525
6	-0.586645315	-0.4258799326	0.0736664815	-0.0170250685	0.0007077363
7	-0.567313207	-0.3935035976	0.0817322377	-0.0182433220	0.0373444210
8	-0.583155077	-0.3969724906	0.0844233929	-0.0215361223	0.0387550190
9	0.745683407	0.7368803384	-0.0795668287	-0.0137215951	-0.0361560011
10	0.605948205	0.2559335905	-0.0447190855	-0.0042122727	0.0699896884
11	-0.300813713	-0.2026940347	-0.0018055726	0.0114200589	-0.0123641566
12	-0.277132195	-0.1734950311	-0.0170916339	-0.0118580108	-0.0177722164
13	-0.079836305	-0.3150117697	-0.0173197723	-0.0182433220	0.0081575071
14	0.046302143	-0.0424798923	-0.0224437690	-0.0171586637	-0.0123641566
15	1.185729010	0.8652158695	-0.0672133959	-0.0182413881	0.0387550190
16	-0.524454370	-0.4096917651	0.0636639639	-0.0181100635	0.0200396197
17	-0.520937344	-0.3414703977	0.0523139747	-0.0144370831	-0.0195873322
18	-0.512319049	-0.3807843232	0.0461889184	0.0030043946	-0.0203618336
19	-0.542369456	-0.3865658116	0.0482087346	0.0143397454	-0.0195873322
20	-0.213045210	-0.1028576996	-0.0226997508	0.0238491950	-0.0120020303
21	1.123895284	0.9636479760	-0.0367907629	0.0557873164	0.0116763986
22	0.161565912	-0.1831171544	-0.0269730571	0.0187404059	-0.0203618336
23	-0.118012210	-0.3081835462	-0.0129514510	-0.0107313439	-0.0315459618
24	-0.206302843	0.0123852839	-0.0035446076	0.0370445278	-0.0056711798
25	-0.003356742	-0.2096429814	-0.0259298699	0.0044123970	0.0466140648
26	0.709931159	0.5425080776	-0.0720072653	0.0045237727	-0.0284726023
27	-0.498962596	-0.3830969185	0.0689772177	-0.0094891648	-0.0252483532
28	-0.252513290	-0.1678503608	0.0077124172	-0.0182415762	0.0391580470
29	-0.420526420	-0.2782179474	0.0456885719	0.0178262150	-0.0123952311
30	0.872907326	0.6284804237	-0.0523708386	-0.0168877277	0.0172631541
31	-0.579660954	-0.4027539790	0.0776960629	0.0192230659	-0.0121126317
32	-0.604060528	-0.4027539790	0.0597098399	0.0125355568	-0.0154317134
33	-0.489340395	-0.3484079882	0.0683086885	0.0119783573	-0.0175339457
34	-0.451892923	-0.2966885227	0.0175708826	0.0142247773	-0.0148583679
35	-0.443120048	-0.2918982269	0.0382664048	-0.0169229708	0.0200396197
36	-0.435917268	-0.3092088871	0.0557218506	-0.0163912180	-0.0300092821
37	0.002218914	0.0338547508	-0.0244785671	0.0109146961	-0.0203618336
38	1.115511858	0.8452802530	-0.0567959488	0.0160007282	-0.0139557529
39	-0.583155077	-0.3992850860	0.0716535926	-0.0182415762	-0.0252483532
40	0.490366971	0.3294461763	-0.0272105283	-0.0167161287	0.0065205052
41	0.682606990	0.4577817075	-0.0482222977	0.0125057227	-0.0269359226
42	-0.468098871	-0.2702589001	0.0468582256	-0.0215936069	-0.0178325091
43	-0.352856654	-0.2148628956	-0.0173202448	-0.0212726537	-0.0217687652
44	0.103719328	0.0036688863	-0.0061395474	-0.0182713834	0.0225798503
45	0.312136678	0.2160623576	-0.0263799113	-0.0034289422	0.0774457063

46	-0.536989810	-0.3565020720	0.0790410265	-0.0142188496	-0.0098011334
47	0.599108730	0.4515518274	-0.0713619367	-0.0161990651	-0.0046246990
48	-0.437810181	-0.3622835603	0.0516340564	-0.0188182918	0.0220138071
49	-0.434139591	-0.3565020720	0.0189110839	-0.0169229708	0.0088060493
50	1.343365226	1.0969674112	-0.0667524469	-0.0137215951	-0.0361560011
51	-0.538784562	-0.3900347046	0.0636639639	-0.0223562190	-0.0315459618
52	-0.468098871	-0.3150117697	0.0394991333	-0.0183134071	0.0290823471
53	1.026573149	0.7605538830	-0.0633414244	-0.0225708512	0.0252535812
54	0.622973914	0.6434321361	-0.0502504733	-0.0181924139	0.0240357476
55	1.397861603	1.0633260584	-0.1269523842	0.0415494633	-0.0018473561
56	1.247449517	0.8103929242	-0.0909061737	0.0030043946	-0.0178325091
57	0.194943509	-0.0253914158	0.0196212220	-0.0101881896	0.0379489630
58	-0.293418260	-0.3056546426	0.0177676641	-0.0094891648	-0.0252483532
59	-0.130961440	-0.0672085010	-0.0155162519	-0.0193354007	-0.0203618336
60	-0.425737731	-0.3081835462	0.0529902759	-0.0181990048	0.0235557974
61	1.142304747	0.3855150977	-0.0753260980	-0.0161188493	-0.0122901198
62	-0.003356742	0.1202413853	-0.0068364762	0.0718234010	-0.0029552602
63	0.794972011	0.6521539683	-0.0566115693	0.0109146961	-0.0269359226
64	0.390266758	0.2858370153	-0.0582709856	0.0028000428	-0.0269359226
65	1.073549875	0.9898134726	-0.0453644140	0.0029231409	-0.0203618336
66	-0.531608919	-0.3553457743	0.0475295161	-0.0220126239	-0.0300092821
67	0.680897503	0.6309723758	-0.0803965368	-0.0208793111	-0.0203618336
68	-0.359895047	-0.2894748843	0.0154010508	-0.0002802729	0.0587049046
69	-0.367124638	-0.2444123084	0.0407095148	0.0247723793	-0.0138425860
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71	-0.577912763	-0.3958161930	0.0683086885	-0.0158606249	-0.0002971981
72	-0.487726971	-0.3056546426	0.0430977973	-0.0222711330	-0.0252483532
73	-0.126721164	-0.0360897201	-0.0195495428	-0.0164273026	0.0112095376
74	1.333748219	1.1654960929	-0.0726525939	0.0070900603	-0.0203618336
75	-0.367124638	-0.2942202405	0.0250061015	0.0033335125	-0.0330826416
76	-0.030004956	-0.2233347807	-0.0247871711	0.0070900603	-0.0269359226
77	0.915229426	0.8926273422	-0.0650930306	0.0546081830	-0.0046246990
78	-0.349423886	-0.2906290893	0.0215624313	-0.0181100635	0.0020484949
79	0.675759395	0.4914230603	-0.0246461365	0.0125057227	0.0687806045
80	-0.104942542	0.0007306647	0.0177676641	0.0043394449	-0.0230669407
81	-0.605801958	-0.4154732535	0.0824050265	-0.0177618573	-0.0284726023
82	1.230764588	0.9362365033	-0.0638023734	-0.0178424803	0.0242460112
83	-0.295178121	-0.1516665091	-0.0178707526	0.0366699626	-0.0046039027
84	0.852604333	0.8726917257	-0.0624195265	0.0450026378	-0.0118700544
85	-0.381442873	-0.2247247393	0.0272379595	0.0654425785	-0.0017184927
86	0.019112211	0.1202413853	-0.0193515762	-0.0180698627	0.0476216348
87	-0.462713811	-0.3437827975	0.0563998685	-0.0089660887	0.0562867367
88	0.967634121	0.9574180958	-0.0500660937	-0.0218063816	-0.0269359226
89	0.138358035	0.0678146295	-0.0375282813	0.0028030770	0.0784532763
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91	1.227416520	0.8178687804	-0.0846372675	-0.0206025361	-0.0284726023
92	1.393053099	1.2066133019	-0.0971750799	-0.0172603559	0.0182614847
93	-0.204510196	-0.2859501116	-0.0171495034	0.0204274731	-0.0203618336
94	-0.133052848	-0.2663700287	-0.0185683362	-0.0189233865	-0.0228691175
95	0.607667771	0.2746232310	-0.0248736923	-0.0128394581	0.0524579707
96	-0.266609594	-0.0583746199	0.0067736986	0.0332526427	-0.0117543166
97	0.165173498	0.1464039510	-0.0226997508	-0.0049375102	-0.0228691175
98	-0.172033690	-0.0034266838	0.0085392705	0.0127440723	-0.0209775287
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101	-0.386877350	-0.2506548612	0.0120040131	-0.0160775447	0.0030940183
102	1.001340148	0.9835835924	-0.0590085040	-0.0137215951	-0.0361560011
103	-0.512319049	-0.4004413837	0.0577366737	0.0029231409	0.0639442685
104	-0.498962596	-0.3228497398	0.0488902882	-0.0207744094	-0.0227199856
105	-0.536989810	-0.3935035976	0.0584037041	-0.0178424803	-0.0330826416
106	0.037258623	0.0836786107	-0.0224437690	0.0147278067	-0.0209775287
107	0.400446000	0.1489853020	-0.0284768244	-0.0118580108	-0.0116671377
108	-0.520937344	-0.3992850860	0.0430977973	0.0028000428	-0.0252483532
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115	-0.039584153	0.0114744377	-0.0012435072	-0.0079287884	0.0556821947
116	0.175792813	0.0706322558	-0.0228934485	0.0114200589	0.0502413168
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121	-0.094187288	0.0475457204	-0.0093423479	-0.0175983550	0.0321050571
122	-0.484501861	-0.3807843232	0.0536712205	-0.0118580108	-0.0203618336
123	0.459817424	0.2783611591	-0.0399252160	-0.0215936069	-0.0315459618
124	-0.321329216	-0.1396504509	0.0370726177	-0.0181765749	0.0423822709
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126	-0.607543389	-0.4247236349	0.0776960629	0.0127370825	-0.0217884121
127	1.284060346	1.2340247746	-0.0517255100	0.0127082067	-0.0233490709
128	0.293401031	0.0084635821	-0.0349469670	-0.0173967117	0.0164966823
129	-0.519227922	-0.3263915025	0.0529902759	0.0226188634	-0.0139557529
130	-0.077645463	-0.1410226012	0.0300008274	0.0060868286	0.0689821185
131	-0.308192454	-0.2742293132	0.0475295161	-0.0107313439	-0.0284726023
132	-0.572633668	-0.3830969185	0.0709827652	-0.0091238905	-0.0227199856
133	0.395355742	0.3493817928	-0.0591006938	0.0342204587	-0.0123952311
134	-0.473190388	-0.3530331789	0.0300008274	0.0010747388	0.0697881744
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136	-0.252513290	-0.1878612527	0.0370726177	0.0109146961	-0.0188859749
137	-0.579660954	-0.4096917651	0.0750089963	-0.0174328271	-0.0361560011
138	0.145417398	0.1474873802	-0.0258933347	-0.0181484274	-0.0330826416
139	1.081968351	0.5088667248	-0.0550443427	-0.0177879914	-0.0284726023
140	1.058468448	0.7493400987	-0.0842685083	0.0627074161	0.0072621271
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143	-0.228239334	-0.0885811143	-0.0004294828	0.0127370825	-0.0203618336
144	-0.549526947	-0.3854095139	0.0676390853	-0.0218589371	-0.0121126317
145	0.022898486	0.2222922377	-0.0242512515	-0.0196086958	-0.0207404493
146	0.101838203	-0.0225908964	-0.0378970405	-0.0166451991	0.0323065711
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148	-0.177638833	-0.1785946744	0.0300008274	0.0184350410	-0.0228691175
149	-0.584903006	-0.4062228721	0.0696447001	-0.0183134071	0.0225759644
150	0.150869373	0.1986186931	-0.0344860180	0.0643104971	-0.0070788206
151	-0.435917268	-0.3622835603	0.0323902239	0.0030412439	-0.0228691175
152	0.359748627	0.2297680939	-0.0256961275	-0.0222426734	-0.0330826416
153	0.458123320	0.1618262301	-0.0307760148	-0.0037817455	-0.0228691175
154	-0.443120048	-0.2942202405	0.0332321772	-0.0058982748	-0.0195873322
155	0.284790023	0.2148163815	-0.0319593498	0.0149072735	-0.0269359226
156	0.393658448	0.5001448925	-0.0300042584	0.0217011701	-0.0120035271
157	0.670657574	0.6745815368	-0.0414002528	-0.0137215951	-0.0361560011
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159	0.643389390	0.2783611591	-0.0528317876	0.0028000428	0.0651533525
160	-0.591870292	-0.4073791697	0.0676390853	0.0126650393	-0.0138708931
161	-0.257996772	-0.2390529048	-0.0035446076	0.0109146961	0.0709972584
162	-0.098515669	-0.0837101327	-0.0003497850	0.0122737624	-0.0203618336
163	-0.597094805	-0.3935035976	0.0770240825	-0.0146101171	-0.0269359226
164	-0.429115335	-0.3565020720	0.0447343507	-0.0197892017	0.0441958969
165	0.167104644	0.2397359021	-0.0248149865	-0.0137215951	-0.0361560011
166	-0.268301794	-0.1754821202	0.0077124172	-0.0068724388	-0.0252483532
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169	-0.604060528	-0.3946598953	0.0597098399	0.0207930695	-0.0121736915
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171	-0.377924420	-0.2338701478	0.0189110839	-0.0181430633	0.0373444210
172	-0.498962596	-0.3495642859	0.0656461858	0.0141628873	-0.0142811636
173	-0.628440555	-0.4281925279	0.0871145480	-0.0170917237	0.0246490392
174	-0.321329216	-0.1817171306	-0.0245066770	0.0384998283	-0.0116595358
175	-0.535205548	-0.3726902394	0.0394991333	0.0204903130	-0.0142811636
176	-0.514032085	-0.3981287883	0.0603726092	-0.0119262648	-0.0346193214
177	-0.410066637	-0.3401905848	0.0388065356	0.0125799601	-0.0188859749
178	0.177492426	-0.1057239467	-0.0047989904	-0.0089660887	-0.0252483532
179	-0.289742051	-0.2930962500	0.0192503250	-0.0142188496	-0.0315459618
180	-0.321329216	-0.2182266281	-0.0004886033	-0.0219777604	-0.0346193214

181	-0.415443445	-0.3437827975	0.0736664815	0.0043153399	0.0728108844
182	-0.345756830	-0.3301393048	0.0241384641	0.0125799601	-0.0207404493
183	0.403832998	0.0809601263	-0.0484066773	-0.0088418554	0.0716018004
184	-0.330913308	-0.1771275604	-0.0101833640	0.0339822165	-0.0040883300
185	-0.207962078	-0.2338701478	-0.0093423479	0.0014469021	-0.0177722164
186	0.689445742	0.5175885570	-0.0490520059	-0.0163912180	0.0044191720
187	-0.495691065	-0.3339327554	0.0529902759	-0.0222711330	-0.0269359226
188	0.561697342	0.1043509540	-0.0332875507	-0.0172264238	0.0172631541
189	2.984667860	1.2651741754	-0.1440996865	0.0241573046	-0.0129975445
190	-0.349423886	-0.2870957704	0.0222338309	-0.0197892017	-0.0346193214
191	-0.199122780	-0.1013094510	-0.0119998813	0.0437042704	-0.0053460210
192	-0.567313207	-0.3992850860	0.0723245116	-0.0178608253	0.0345232250
193	0.483574726	0.1686500686	-0.0368829527	-0.0165379102	-0.0045293142
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[100,]	-0.36548431	0.64544581	-0.579276986	1	-0.138846687	-0.59990329
[101,]	-0.50082013	-0.38203158	-0.557035440	1	-0.142674338	-0.55747164
[102,]	-0.38203158	-0.26271839	-0.531413199	1	-0.200484566	-0.56375692
[103,]	-0.62805386	-1.16654387	-0.525451019	1	0.147236934	-0.51280814
[104,]	-0.44579260	-0.84108363	-0.525451019	1	0.022369075	-0.51280814
[105,]	-0.46191569	-1.13623630	-0.525451019	1	0.122828785	-0.51280814
[106,]	-0.67654195	1.50884303	-0.525451019	1	0.047507514	-0.51280814
[107,]	-0.52358812	-0.27646167	-0.525451019	1	0.051809406	-0.51280814
[108,]	-0.39395854	-1.08743946	-0.513741669	1	0.097362697	-0.50161544
[109,]	-0.78482549	-0.91270880	-0.479048453	1	0.071826960	-0.46738041
[110,]	-0.48467859	-0.70152313	-0.467383336	1	0.063981406	-0.45524197
[111,]	-0.26271839	2.02933599	-0.467383336	1	-0.338904881	-0.45524197
[112,]	-0.55071762	0.57424508	-0.463428504	1	-0.015279425	-0.45869898
[113,]	-0.30889708	0.94695265	-0.432203559	1	0.117311955	-0.42435477
[114,]	-0.32786078	-0.67238188	-0.428328452	1	0.095673458	-0.42186050
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[116,]	-0.39685458	0.64398184	-0.408419085	1	0.079924771	-0.39651402
[117,]	-0.30555455	-0.40361134	-0.408419085	1	0.032430966	-0.39651402
[118,]	-0.45679495	-0.91831438	-0.408419085	1	-0.083331118	-0.39651402
[119,]	-0.36368483	-0.80428544	-0.378576421	1	-0.162826325	-0.40865015
[120,]	-0.40361134	-1.08178221	-0.372583293	1	0.091705442	-0.40085280
[121,]	-0.42329295	0.69854465	-0.372583293	1	0.127838178	-0.40085280
[122,]	-0.38644983	-1.31120307	-0.348567882	1	0.274202381	-0.41174040
[123,]	-0.44059756	0.28289906	-0.325044646	1	-0.120995346	-0.40636537
[124,]	-0.24452846	-0.75780803	-0.325044646	1	-0.004554041	-0.40636537
[125,]	-0.21133244	0.46157033	-0.290458594	1	-0.171732663	-0.37181373
[126,]	-0.85204371	-1.10750240	-0.290458594	1	0.058712675	-0.37181373
[127,]	-0.48957631	4.03955578	-0.290458594	1	0.031506944	-0.37181373
[128,]	-0.40376999	-0.78260476	-0.290458594	1	0.145063029	-0.37181373
[129,]	-0.35288921	-0.80834863	-0.256648235	1	-0.055054764	-0.31696188
[130,]	-0.44978470	0.32913420	-0.252516956	1	-0.077624527	-0.30927983
[131,]	-0.16628846	-0.62805386	-0.244861994	1	0.109095848	-0.28913186
[132,]	-0.22439316	-1.06146657	-0.233519323	1	0.094354807	-0.28514891
[133,]	-0.21685725	0.21768420	-0.233519323	1	0.452573565	-0.28514891
[134,]	-0.24942960	-0.69393993	-0.233519323	1	-0.079661420	-0.28514891

[135,]	-0.27646167	-0.07563251	-0.222388694	1	-0.105052216	-0.24340539
[136,]	-0.16459872	0.13655393	-0.219304893	1	0.092403499	-0.23671463
[137,]	-0.11758488	-0.95259366	-0.176991896	1	-0.069074158	-0.17182327
[138,]	-0.07563251	1.70156067	-0.176991896	1	-0.011129563	-0.17182327
[139,]	-0.21176920	1.18798925	-0.176991896	1	-0.141631696	-0.17182327
[140,]	-0.17075265	2.93263621	-0.176991896	1	-0.171483603	-0.17182327
[141,]	-0.17848126	1.88591396	-0.176991896	1	-0.174004538	-0.17182327
[142,]	-0.13364317	0.62778573	-0.120374994	1	-0.152129584	-0.07714638
[143,]	-0.32748409	0.18890943	-0.120374994	1	0.029062166	-0.07714638
[144,]	-0.14512032	-0.90655147	-0.120374994	1	-0.025797042	-0.07714638
[145,]	0.09922677	1.07973542	-0.109006614	1	0.059742809	-0.06273899
[146,]	0.05667061	0.31281671	-0.092113245	1	0.132642178	-0.04430683
[147,]	-0.19939069	-0.67654195	-0.0864448467	1	0.157583934	-0.05468331
[148,]	0.19719384	-0.42329295	-0.063962293	1	0.052112574	-0.02041327
[149,]	-0.11765766	-0.99868830	-0.063962293	1	-0.050101422	-0.02041327
[150,]	0.17492902	1.62490861	-0.063962293	1	-0.184794176	-0.02041327
[151,]	0.17114497	-0.63998148	-0.063962293	1	-0.116548035	-0.02041327
[152,]	-0.09997982	-0.78319063	-0.035203267	1	0.082073368	0.01328150
[153,]	0.01298748	-0.19157862	-0.024353071	1	0.178619289	0.01466317
[154,]	-0.19157862	-0.49187835	-0.005689718	1	-0.108774674	0.02754261
[155,]	0.02210185	0.60066076	-0.005689718	1	-0.011020392	0.02754261
[156,]	0.03697775	0.82058218	0.006310439	1	-0.203972591	0.02331371
[157,]	0.06817577	0.04856200	0.018298237	1	0.084701200	0.03863190
[158,]	-0.17474636	-0.89669275	0.018298237	1	0.010617627	0.03863190
[159,]	0.14340482	-0.16628846	0.053995323	1	-0.080136690	0.04504779
[160,]	0.11971368	-0.97781321	0.053995323	1	-0.070976517	0.04504779
[161,]	0.07253044	0.02011579	0.053995323	1	0.084402541	0.04504779
[162,]	0.10225550	0.53361662	0.077630610	1	0.039785641	0.08630661
[163,]	0.02011579	-1.02204878	0.113229534	1	0.008641268	0.14595207
[164,]	0.27253876	-0.83363167	0.124868995	1	-0.041079634	0.15119759
[165,]	0.04856200	0.38098944	0.142217678	1	0.006865430	0.16295938
[166,]	0.07989194	0.07253044	0.159482937	1	-0.026628973	0.18473778
[167,]	0.28289906	0.24611070	0.171125554	1	0.027949339	0.18632600
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[169,]	0.03586790	-0.97230598	0.171125554	1	-0.017770786	0.18632600
[170,]	0.46908272	0.31494566	0.171125554	1	0.004352215	0.18632600
[171,]	0.15777367	-0.84715267	0.199728991	1	0.028438108	0.22690461
[172,]	0.18890943	-0.80875450	0.227858695	1	-0.095874785	0.24832625
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[174,]	0.13655393	0.72567226	0.238969067	1	0.051913240	0.27959411
[175,]	0.32913420	-0.91452135	0.261769580	1	-0.029451136	0.29881129
[176,]	0.24611070	-0.89716316	0.284569849	1	-0.000445808	0.30953797
[177,]	0.46157033	-0.80536198	0.300521468	1	0.066835915	0.35058326
[178,]	0.24845890	0.72186678	0.313046015	1	-0.105257188	0.33712185
[179,]	0.31494566	-0.66589474	0.330299682	1	0.002710042	0.35126319

Homework4

[180,]	0.45631176	-0.30555455	0.341897252	1	-0.100616214	0.35545721
[181,]	0.50198446	-0.71294424	0.399461625	1	-0.105770315	0.43864651
[182,]	0.48353567	-0.91109499	0.399461625	1	0.148732912	0.43864651
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[184,]	0.63769875	0.32322836	0.399461625	1	0.064626519	0.43864651
[185,]	0.32322836	0.50918497	0.399461625	1	-0.002585847	0.43864651
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[187,]	0.31281671	-0.84712434	0.457552898	1	0.021800164	0.50639097
[188,]	0.65920225	1.78164560	0.477592704	1	-0.177015962	0.51144254
[189,]	0.54883313	0.58133253	0.487956500	1	-0.074733414	0.46695548
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[191,]	0.48868813	0.27253876	0.494349817	1	-0.156479629	0.45393095
[192,]	0.73175708	-0.86612262	0.494349817	1	-0.054615141	0.45393095
[193,]	0.28135321	-0.17075265	0.494349817	1	-0.009932071	0.45393095
[194,]	0.64544581	-0.46191569	0.519166670	1	-0.057042322	0.45334159
[195,]	0.42686870	-0.86061276	0.519166670	1	0.223071034	0.45334159
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[201,]	0.46488941	0.05667061	0.519166670	1	-0.154364919	0.45334159
[202,]	0.51655729	-0.21685725	0.553683247	1	-0.018574115	0.47377019
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[204,]	0.32708275	-0.59519561	0.575612779	1	-0.042346112	0.53870249
[205,]	0.76702681	-0.48957631	0.575612779	1	0.198792481	0.53870249
[206,]	0.31970638	-0.21176920	0.579272350	1	0.031084476	0.54571418
[207,]	0.53361662	0.41534690	0.586599813	1	0.091252220	0.55054366
[208,]	0.60066076	-1.12027582	0.603004014	1	0.059706586	0.56411124
[209,]	0.72186678	0.66326401	0.630252103	1	0.114321491	0.59684611
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[211,]	0.67074224	-0.81509472	0.662781774	1	0.032316059	0.62335577
[212,]	0.21768420	0.73175708	0.684467821	1	-0.249743744	0.66700852
[213,]	0.67707206	-0.57646464	0.738681782	1	-0.061077083	0.72261133
[214,]	0.64398184	-0.79701834	0.738681782	1	-0.100590633	0.72261133
[215,]	1.02370519	-1.09179744	0.738681782	1	0.095951489	0.72261133
[216,]	0.77044719	0.28135321	0.738681782	1	0.200660128	0.72261133
[217,]	0.66326401	-0.82238629	0.792900435	1	-0.075222682	0.81024734
[218,]	0.72567226	-0.45753219	0.792900435	1	0.031986811	0.81024734
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[224,]	1.31290170	-0.88856580	0.890522380	1	0.025162406	0.92587679

Homework4

[225,]	1.02989994	-0.13364317	0.901373957	1	0.008193854	0.93510870
[226,]	0.89814960	1.90611124	0.919458115	1	0.105791495	0.96395719
[227,]	0.82886957	-0.87940092	0.933927383	1	0.004689623	0.96672558
[228,]	1.11465345	-1.01070096	0.955630924	1	0.032096959	1.00415982
[229,]	0.82235276	-0.39685458	0.955630924	1	-0.009316190	1.00415982
[230,]	1.01473605	-1.23859247	0.977335428	1	0.225184957	1.03738491
[231,]	1.18798925	0.03697775	1.064159283	1	-0.038091520	1.08251040
[232,]	0.91844922	-0.32786078	1.064159283	1	-0.097684591	1.08251040
[233,]	1.15642306	0.82886957	1.064159283	1	0.088449536	1.08251040
[234,]	0.94695265	-0.45679495	1.082242957	1	0.050624180	1.08933525
[235,]	1.36938798	-0.55071762	1.154590099	1	0.091322057	1.17394665
[236,]	1.07973542	-0.48471456	1.158207654	1	-0.152827161	1.16478334
[237,]	1.21461495	0.48868813	1.172680747	1	-0.006674795	1.19188441
[238,]	1.33663047	-0.24942960	1.281184211	1	0.013998238	1.30514021
[239,]	1.39029649	1.02989994	1.389668435	1	-0.144849519	1.40810789
[240,]	1.37892613	-0.96762884	1.443905227	1	0.171183725	1.46733885
[241,]	1.62490861	1.31290170	1.461982445	1	-0.438606442	1.50469729
[242,]	1.46812071	-0.50082013	1.498138805	1	-0.048460807	1.55782359
[243,]	1.60625926	-0.62017158	1.541516725	1	-0.030118381	1.59921416
[244,]	1.50884303	-0.77952842	1.579458529	1	0.103561868	1.62948521
[245,]	1.78164560	1.39029649	1.628247644	1	-0.021742855	1.70107641
[246,]	1.68708276	-0.88107233	1.714953538	1	0.028948649	1.79727643
[247,]	1.70156067	-0.22439316	1.714953538	1	-0.011038199	1.79727643
[248,]	2.02933599	0.97250844	1.714953538	1	-0.141207901	1.79727643
[249,]	1.88591396	0.17492902	1.736660220	1	-0.245070766	1.81670936
[250,]	1.97233014	-0.36548431	1.823301805	1	-0.205222169	1.91646792
[251,]	1.90611124	0.46488941	2.039793874	1	0.041709713	2.11647322
[252,]	2.60778599	-0.99288176	2.148029324	1	0.140758078	2.21036725
[253,]	2.52956451	1.68708276	2.364444127	1	0.003348348	2.38977515
[254,]	2.45033085	0.02210185	2.515855620	1	-0.035061179	2.53216402
[255,]	2.93263621	0.14340482	2.796835458	1	-0.097503348	2.78678953
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[257,]	2.84609093	-0.82839818	3.012847291	1	-0.115574310	2.98503588
[258,]	2.87977735	-0.73164591	3.068102142	1	-0.109235926	3.03384651
[259,]	2.58247667	0.63769875	3.099280909	1	-0.249843878	3.06138898
[260,]	3.16754940	0.86730872	3.174910324	1	-0.089723221	3.12819794
[261,]	3.43944845	-0.44059756	3.504077632	1	0.115976980	3.41897537
[262,]	4.03955578	1.01473605	4.120278018	1	-0.054391732	3.96331000
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	[,7]	[,8]	[,9]	[,10]	[,11]	[,12]
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[3,]	0.4623410	-1.12453243	-1.091422e+00	-1.086668892	0.07387857	0.4768220
[4,]	0.4623410	-1.12453243	-1.091422e+00	-1.086668892	0.07387857	0.4768220
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[6,] 0.4623410 -1.12453243 -1.091422e+00 -1.086668892 0.07387857 0.4768220
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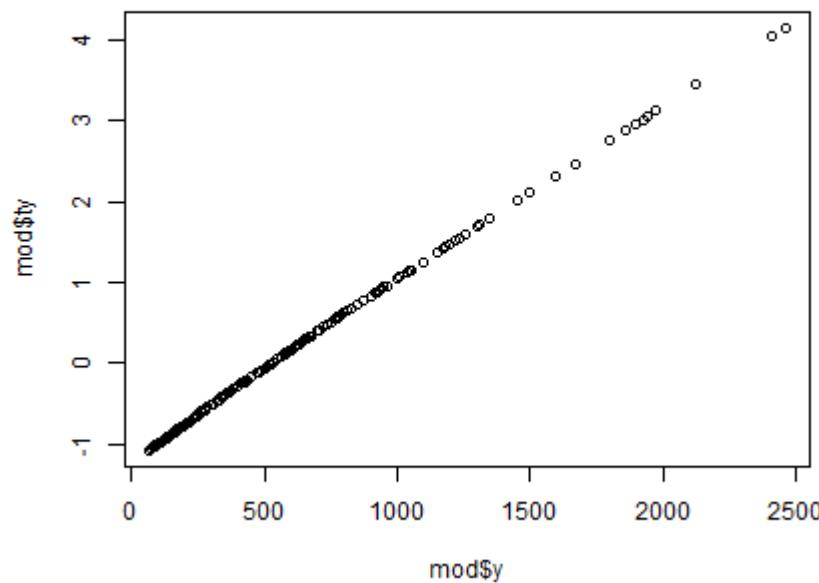
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[210,]	0.5000000	0.61377322	6.260191e-01	0.626019126	0.13178147	0.5000000
[211,]	0.5000000	0.64250829	6.585487e-01	0.658548718	0.12921506	0.5000000
[212,]	0.5000000	0.66799902	6.802351e-01	0.680235112	0.12987072	0.5000000
[213,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[214,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[215,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[216,]	0.4999519	0.72777537	7.344500e-01	0.734451098	0.12710129	0.5000000
[217,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[218,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[219,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[220,]	0.4997778	0.77616487	7.886578e-01	0.788667083	0.12539524	0.5000000
[221,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000
[222,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000
[223,]	0.4995150	0.83471015	8.428699e-01	0.842883069	0.12116584	0.5000000
[224,]	0.4992723	0.89628538	8.862802e-01	0.886255857	0.11423595	0.5000000
[225,]	0.4992033	0.90865312	8.971297e-01	0.897099054	0.11464206	0.5000000
[226,]	0.4990901	0.92954239	9.152139e-01	0.915170327	0.11906339	0.5000000
[227,]	0.4990155	0.94314695	9.296730e-01	0.929628646	0.12064491	0.5000000
[228,]	0.4989350	0.96773010	9.513733e-01	0.951315040	0.12374608	0.5000000
[229,]	0.4989350	0.96773010	9.513733e-01	0.951315040	0.12374608	0.5000000
[230,]	0.4988594	0.99122925	9.730707e-01	0.973001434	0.12847828	0.5000000

[231,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[232,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[233,]	0.4979900	1.08786848	1.059935e+00	1.059747011	0.12316879	0.5000000
[234,]	0.4979856	1.11120247	1.078042e+00	1.077818284	0.12225422	0.5000000
[235,]	0.4970791	1.18253631	1.150423e+00	1.150107710	0.12726471	0.5000000
[236,]	0.4971793	1.18487688	1.154014e+00	1.153720663	0.12836245	0.5000000
[237,]	0.4971209	1.19445865	1.168431e+00	1.168178982	0.12736025	0.5000000
[238,]	0.4954442	1.30011184	1.276968e+00	1.276610954	0.12792537	0.5000000
[239,]	0.4937675	1.40576502	1.385473e+00	1.385042925	0.12849048	0.4989320
[240,]	0.4929291	1.45859161	1.439715e+00	1.439258911	0.12877304	0.4977482
[241,]	0.4926496	1.47619977	1.457793e+00	1.457330183	0.12886722	0.4973556
[242,]	0.4920907	1.51141820	1.493948e+00	1.493474896	0.12905560	0.4965732
[243,]	0.4914200	1.55367947	1.537329e+00	1.536847685	0.12928164	0.4956397
[244,]	0.4908332	1.59065808	1.575283e+00	1.574798875	0.12947943	0.4948274
[245,]	0.4900786	1.63820201	1.624076e+00	1.623593262	0.12973374	0.4937892
[246,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[247,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[248,]	0.4887372	1.72272456	1.710804e+00	1.710338839	0.13018583	0.4919608
[249,]	0.4884019	1.74385519	1.732483e+00	1.732025233	0.13029885	0.4915071
[250,]	0.4870605	1.82837774	1.819185e+00	1.818770810	0.13075094	0.4897058
[251,]	0.4837070	2.03968410	2.035855e+00	2.035634752	0.13188117	0.4852946
[252,]	0.4820303	2.14533728	2.144143e+00	2.144066724	0.13244629	0.4831371
[253,]	0.4786768	2.35664364	2.360626e+00	2.360930666	0.13357652	0.4789153
[254,]	0.4763293	2.50455810	2.512090e+00	2.512735426	0.13436768	0.4760317
[255,]	0.4719698	2.77925637	2.793219e+00	2.794658551	0.13583698	0.4708272
[256,]	0.4699088	2.90912526	2.926056e+00	2.927943130	0.13653162	0.4684326
[257,]	0.4686163	2.99056273	3.009330e+00	3.011522494	0.13696721	0.4669520
[258,]	0.4677588	3.04459588	3.064571e+00	3.066976772	0.13725622	0.4659784
[259,]	0.4672749	3.07508527	3.095739e+00	3.098268071	0.13741930	0.4654320
[260,]	0.4661012	3.14904250	3.171331e+00	3.174170451	0.13781488	0.4641159
[261,]	0.4609928	3.47093182	3.500158e+00	3.504525800	0.13953659	0.4585335
[262,]	0.4514297	4.07350783	4.114945e+00	4.122950199	0.14275963	0.4486848
[263,]	0.4498368	4.17387835	4.217252e+00	4.225960572	0.14329649	0.4471160

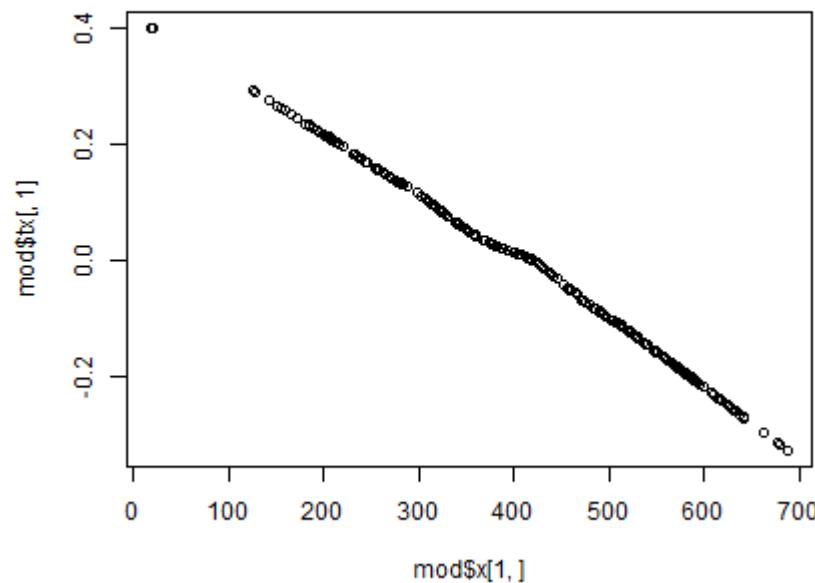
In [118...]

```
## plots
# view the response transformation
R"plot(mod$y, mod$ty)"
```



Out[118...]
RObject{NilSxp}
NULL

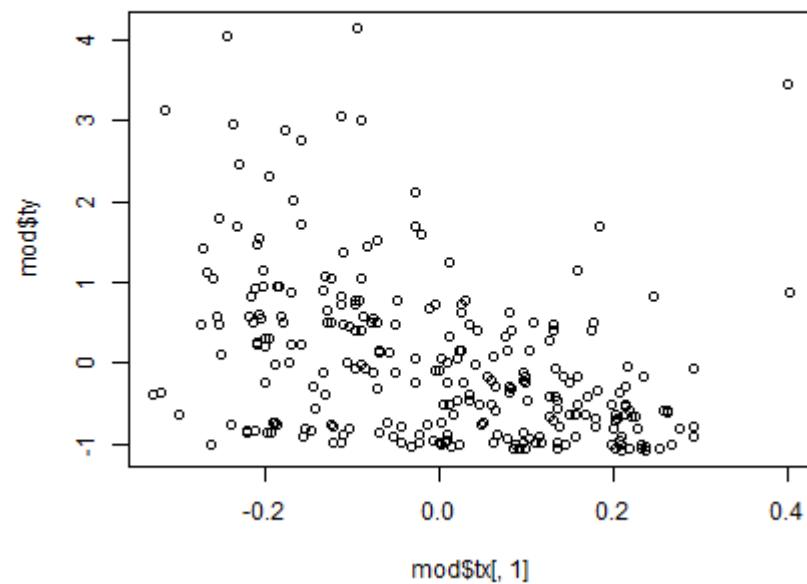
In [70]:
`# view x transformation
R"plot(mod$x[1,], mod$tx[,1])"`



Out[70]: RObject{NilSxp}
NULL

In [119...]

```
# linearity  
R"plot(mod$tx[,1], mod$ty)"
```



Out[119... RObject{NilSxp}
NULL

In []: