

## Program Summary - HW10.sas

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### Execution Environment

Author: sasdemo  
 File: /folders/myfolders/Homework/HW10/HW10.sas  
 SAS Platform: Linux LIN X64 2.6.32-696.20.1.el6.x86\_64  
 SAS Host: LOCALHOST  
 SAS Version: 9.04.01M5P09132017  
 SAS Locale: en\_US  
 Submission Time: 11/20/2018, 4:02:57 PM  
 Browser Host: 10.0.2.2  
 User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/70.0.3538.102 Safari/537.36  
 Application Server: LOCALHOST.LOCALDOMAIN

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### Code: HW10.sas

```

/* HW 10 Jonathan Wilson */

options leftmargin=.5in rightmargin=1in orientation=landscape nocenter;
ods pdf file="/folders/myfolders/Homework/HW10/summary.pdf";

proc format;
  value myNum 0='zero'
              1='one'
              2='two'
              3='three'
              4='four'
              5='five'
              6='six'
              7='seven'
              8='eight'
              9='nine';

run;

data A;
do i = 0 to 9;
  do j = 0 to 9;
    k = i*10 + j;
    array x [10] x1-x10; /*Array*/
    do a=1 to 10;
      x[a]=a;
      x[a]=x[a]*(1/k);
    end;
    remain = mod(k, 2);
    if remain=0 then
      m='EVEN';
    else m='ODD';
    n=put(i,myNum.); /*Formatter*/
    o=put(j,myNum.);
    p=UPCASE(CAT(TRIM(n),o));
    q=tranwrd(p, "ON", "NO");
    length r $ 2;
    r = left(q);
    /* r=SUBSTR(q, 0, 2)="" */
    output;
  end;
end;
drop a;
drop remain;
run;

proc print data=A noobs;

```

```

title1 "HW 10 Loops and Arrays";
run;

ods pdf close;

```

**Log: HW10.sas**

Warnings (1)

Notes (22)

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1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
73
74      /* HW 10 Jonathan Wilson */
75
76      options leftmargin=.5in rightmargin=1in orientation=landscape nocenter;
77      ods pdf file="/folders/myfolders/Homework/HW10/summary.pdf";
NOTE: Writing ODS PDF output to DISK destination "/folders/myfolders/Homework/HW10/summary.pdf", printer "PDF".
78
79
80      proc format;
81          value myNum 0='zero'
82                    1='one'
83                    2='two'
84                    3='three'
85                    4='four'
86                    5='five'
87                    6='six'
88                    7='seven'
89                    8='eight'
90                    9='nine';
NOTE: Format MYNUM is already on the library WORK.FORMATS.
NOTE: Format MYNUM has been output.
91      run;

```

```

NOTE: PROCEDURE FORMAT used (Total process time):
      real time           0.00 seconds
      cpu time            0.01 seconds

```

```

92
93      data A;
94      do i = 0 to 9;
95      do j = 0 to 9;
96      k = i*10 + j;
97      array x [10] x1-x10; /*Array*/
98      do a=1 to 10;
99      x[a]=a;
100         x[a]=x[a]*(1/k);
101         end;
102         remain = mod(k, 2);
103         if remain=0 then
104             m='EVEN';
105         else m='ODD';
106         n=put(i,myNum.); /*Formatter*/
107         o=put(j,myNum.);
108         p=UPCASE(CAT(TRIM(n),o));
109         q=tranwrd(p, "ON", "NO");
110         length r $ 2;
111         r = left(q);
112         /* r=SUBSTR(q, 0, 2)=""; */
113         output;
114         end;
115     end;
116     drop a;
117     drop remain
118     run;
119

```

WARNING: The variable run in the DROP, KEEP, or RENAME list has never been referenced.

NOTE: Division by zero detected at line 100 column 22.

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 i=10 j=10 k=99 x1=0.0101010101 x2=0.0202020202 x3=0.0303030303 x4=0.0404040404 x5=0.0505050505 x6=0.0606060606 x7=0.0707070707  
 x8=0.0808080808 x9=0.0909090909 x10=0.1010101010 a=11 remain=1 m=ODD n=nine o=nine p=NINENINE q=NINENINE r=NI \_ERROR\_=1 \_N\_=1  
 NOTE: Missing values were generated as a result of performing an operation on missing values.  
 Each place is given by: (Number of times) at (Line):(Column).  
 10 at 100:19  
 NOTE: Mathematical operations could not be performed at the following places. The results of the operations have been set to missing values.  
 Each place is given by: (Number of times) at (Line):(Column).  
 10 at 100:22  
 NOTE: The data set WORK.A has 100 observations and 19 variables.  
 NOTE: DATA statement used (Total process time):  
 real time 0.01 seconds  
 cpu time 0.01 seconds

```
120      proc print data=A noobs;
121      title1 "HW 10 Loops and Arrays";
122      run;
```

NOTE: There were 100 observations read from the data set WORK.A.  
 NOTE: PROCEDURE PRINT used (Total process time):  
 real time 1.26 seconds  
 cpu time 1.25 seconds

```
123
124      ods pdf close;
NOTE: ODS PDF printed 4 pages to /folders/myfolders/Homework/HW10/summary.pdf.
125
126      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
139
```

## Results: HW10.sas

### HW 10 Loops and Arrays

i	j	k	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	m	n	o	p	q	r
0	0	0	.	.	.	.	.	.	.	.	.	.	EVEN	zero	zero	ZEROZERO	ZEROZERO	ZE
0	1	1	1.00000	2.00000	3.00000	4.00000	5.00000	6.00000	7.00000	8.00000	9.00000	10.0000	ODD	zero	one	ZEROONE	ZERONE	ZE
0	2	2	0.50000	1.00000	1.50000	2.00000	2.50000	3.00000	3.50000	4.00000	4.50000	5.0000	EVEN	zero	two	ZEROTWO	ZEROTWO	ZE
0	3	3	0.33333	0.66667	1.00000	1.33333	1.66667	2.00000	2.33333	2.66667	3.00000	3.3333	ODD	zero	three	ZEROTHREE	ZEROTHREE	ZE
0	4	4	0.25000	0.50000	0.75000	1.00000	1.25000	1.50000	1.75000	2.00000	2.25000	2.5000	EVEN	zero	four	ZEROFOUR	ZEROFOUR	ZE
0	5	5	0.20000	0.40000	0.60000	0.80000	1.00000	1.20000	1.40000	1.60000	1.80000	2.0000	ODD	zero	five	ZEROFIVE	ZEROFIVE	ZE
0	6	6	0.16667	0.33333	0.50000	0.66667	0.83333	1.00000	1.16667	1.33333	1.50000	1.6667	EVEN	zero	six	ZEROSIX	ZEROSIX	ZE
0	7	7	0.14286	0.28571	0.42857	0.57143	0.71429	0.85714	1.00000	1.14286	1.28571	1.4286	ODD	zero	seven	ZEROSEVEN	ZEROSEVEN	ZE
0	8	8	0.12500	0.25000	0.37500	0.50000	0.62500	0.75000	0.87500	1.00000	1.12500	1.2500	EVEN	zero	eight	ZEROEIGHT	ZEROEIGHT	ZE
0	9	9	0.11111	0.22222	0.33333	0.44444	0.55556	0.66667	0.77778	0.88889	1.00000	1.1111	ODD	zero	nine	ZERONINE	ZERONINE	ZE
1	0	10	0.10000	0.20000	0.30000	0.40000	0.50000	0.60000	0.70000	0.80000	0.90000	1.0000	EVEN	one	zero	ONEZERO	NOEZERO	NO
1	1	11	0.09091	0.18182	0.27273	0.36364	0.45455	0.54545	0.63636	0.72727	0.81818	0.9091	ODD	one	one	ONEONE	NOEONE	NO
1	2	12	0.08333	0.16667	0.25000	0.33333	0.41667	0.50000	0.58333	0.66667	0.75000	0.8333	EVEN	one	two	ONETWO	NOETWO	NO
1	3	13	0.07692	0.15385	0.23077	0.30769	0.38462	0.46154	0.53846	0.61538	0.69231	0.7692	ODD	one	three	ONETHREE	NOETHREE	NO
1	4	14	0.07143	0.14286	0.21429	0.28571	0.35714	0.42857	0.50000	0.57143	0.64286	0.7143	EVEN	one	four	ONEFOUR	NOEFOUR	NO
1	5	15	0.06667	0.13333	0.20000	0.26667	0.33333	0.40000	0.46667	0.53333	0.60000	0.6667	ODD	one	five	ONEFIVE	NOEFIVE	NO
1	6	16	0.06250	0.12500	0.18750	0.25000	0.31250	0.37500	0.43750	0.50000	0.56250	0.6250	EVEN	one	six	ONESIX	NOESIX	NO
1	7	17	0.05882	0.11765	0.17647	0.23529	0.29412	0.35294	0.41176	0.47059	0.52941	0.5882	ODD	one	seven	ONESEVEN	NOESEVEN	NO
1	8	18	0.05556	0.11111	0.16667	0.22222	0.27778	0.33333	0.38889	0.44444	0.50000	0.5556	EVEN	one	eight	ONEEIGHT	NOEEIGHT	NO
1	9	19	0.05263	0.10526	0.15789	0.21053	0.26316	0.31579	0.36842	0.42105	0.47368	0.5263	ODD	one	nine	ONENINE	NOENINE	NO
2	0	20	0.05000	0.10000	0.15000	0.20000	0.25000	0.30000	0.35000	0.40000	0.45000	0.5000	EVEN	two	zero	TWOZERO	TWOZERO	TW
2	1	21	0.04762	0.09524	0.14286	0.19048	0.23810	0.28571	0.33333	0.38095	0.42857	0.4762	ODD	two	one	TWOONE	TWONE	TW
2	2	22	0.04545	0.09091	0.13636	0.18182	0.22727	0.27273	0.31818	0.36364	0.40909	0.4545	EVEN	two	two	TWOTWO	TWOTWO	TW
2	3	23	0.04348	0.08696	0.13043	0.17391	0.21739	0.26087	0.30435	0.34783	0.39130	0.4348	ODD	two	three	TWOTHREE	TWOTHREE	TW
2	4	24	0.04167	0.08333	0.12500	0.16667	0.20833	0.25000	0.29167	0.33333	0.37500	0.4167	EVEN	two	four	TWOFOUR	TWOFOUR	TW
2	5	25	0.04000	0.08000	0.12000	0.16000	0.20000	0.24000	0.28000	0.32000	0.36000	0.4000	ODD	two	five	TWOFIVE	TWOFIVE	TW
2	6	26	0.03846	0.07692	0.11538	0.15385	0.19231	0.23077	0.26923	0.30769	0.34615	0.3846	EVEN	two	six	TWOSIX	TWOSIX	TW
2	7	27	0.03704	0.07407	0.11111	0.14815	0.18519	0.22222	0.25926	0.29630	0.33333	0.3704	ODD	two	seven	TWOSEVEN	TWOSEVEN	TW
2	8	28	0.03571	0.07143	0.10714	0.14286	0.17857	0.21429	0.25000	0.28571	0.32143	0.3571	EVEN	two	eight	TWOEIGHT	TWOEIGHT	TW
2	9	29	0.03448	0.06897	0.10345	0.13793	0.17241	0.20690	0.24138	0.27586	0.31034	0.3448	ODD	two	nine	TWONINE	TWONINE	TW

i	j	k	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	m	n	o	p	q	r
3	0	30	0.03333	0.06667	0.10000	0.13333	0.16667	0.20000	0.23333	0.26667	0.30000	0.3333	EVEN	three	zero	THREEZERO	THREEZERO	TH
3	1	31	0.03226	0.06452	0.09677	0.12903	0.16129	0.19355	0.22581	0.25806	0.29032	0.3226	ODD	three	one	THREEONE	THREENOE	TH
3	2	32	0.03125	0.06250	0.09375	0.12500	0.15625	0.18750	0.21875	0.25000	0.28125	0.3125	EVEN	three	two	THREETWO	THREETWO	TH
3	3	33	0.03030	0.06061	0.09091	0.12121	0.15152	0.18182	0.21212	0.24242	0.27273	0.3030	ODD	three	three	THREETHREE	THREETHREE	TH
3	4	34	0.02941	0.05882	0.08824	0.11765	0.14706	0.17647	0.20588	0.23529	0.26471	0.2941	EVEN	three	four	THREEFOUR	THREEFOUR	TH
3	5	35	0.02857	0.05714	0.08571	0.11429	0.14286	0.17143	0.20000	0.22857	0.25714	0.2857	ODD	three	five	THREEFIVE	THREEFIVE	TH
3	6	36	0.02778	0.05556	0.08333	0.11111	0.13889	0.16667	0.19444	0.22222	0.25000	0.2778	EVEN	three	six	THREESIX	THREESIX	TH
3	7	37	0.02703	0.05405	0.08108	0.10811	0.13514	0.16216	0.18919	0.21622	0.24324	0.2703	ODD	three	seven	THREESEVEN	THREESEVEN	TH
3	8	38	0.02632	0.05263	0.07895	0.10526	0.13158	0.15789	0.18421	0.21053	0.23684	0.2632	EVEN	three	eight	THREEEIGHT	THREEEIGHT	TH
3	9	39	0.02564	0.05128	0.07692	0.10256	0.12821	0.15385	0.17949	0.20513	0.23077	0.2564	ODD	three	nine	THREENINE	THREENINE	TH
4	0	40	0.02500	0.05000	0.07500	0.10000	0.12500	0.15000	0.17500	0.20000	0.22500	0.2500	EVEN	four	zero	FOURZERO	FOURZERO	FO
4	1	41	0.02439	0.04878	0.07317	0.09756	0.12195	0.14634	0.17073	0.19512	0.21951	0.2439	ODD	four	one	FOURONE	FOURNOE	FO
4	2	42	0.02381	0.04762	0.07143	0.09524	0.11905	0.14286	0.16667	0.19048	0.21429	0.2381	EVEN	four	two	FOUR TWO	FOUR TWO	FO
4	3	43	0.02326	0.04651	0.06977	0.09302	0.11628	0.13953	0.16279	0.18605	0.20930	0.2326	ODD	four	three	FOURTHREE	FOURTHREE	FO
4	4	44	0.02273	0.04545	0.06818	0.09091	0.11364	0.13636	0.15909	0.18182	0.20455	0.2273	EVEN	four	four	FOURFOUR	FOURFOUR	FO
4	5	45	0.02222	0.04444	0.06667	0.08889	0.11111	0.13333	0.15556	0.17778	0.20000	0.2222	ODD	four	five	FOURFIVE	FOURFIVE	FO
4	6	46	0.02174	0.04348	0.06522	0.08696	0.10870	0.13043	0.15217	0.17391	0.19565	0.2174	EVEN	four	six	FOURSIX	FOURSIX	FO
4	7	47	0.02128	0.04255	0.06383	0.08511	0.10638	0.12766	0.14894	0.17021	0.19149	0.2128	ODD	four	seven	FOURSEVEN	FOURSEVEN	FO
4	8	48	0.02083	0.04167	0.06250	0.08333	0.10417	0.12500	0.14583	0.16667	0.18750	0.2083	EVEN	four	eight	FOUREIGHT	FOUREIGHT	FO
4	9	49	0.02041	0.04082	0.06122	0.08163	0.10204	0.12245	0.14286	0.16327	0.18367	0.2041	ODD	four	nine	FOURNINE	FOURNINE	FO
5	0	50	0.02000	0.04000	0.06000	0.08000	0.10000	0.12000	0.14000	0.16000	0.18000	0.2000	EVEN	five	zero	FIVEZERO	FIVEZERO	FI
5	1	51	0.01961	0.03922	0.05882	0.07843	0.09804	0.11765	0.13725	0.15686	0.17647	0.1961	ODD	five	one	FIVEONE	FIVENOE	FI
5	2	52	0.01923	0.03846	0.05769	0.07692	0.09615	0.11538	0.13462	0.15385	0.17308	0.1923	EVEN	five	two	FIVETWO	FIVETWO	FI
5	3	53	0.01887	0.03774	0.05660	0.07547	0.09434	0.11321	0.13208	0.15094	0.16981	0.1887	ODD	five	three	FIVETHREE	FIVETHREE	FI
5	4	54	0.01852	0.03704	0.05556	0.07407	0.09259	0.11111	0.12963	0.14815	0.16667	0.1852	EVEN	five	four	FIVEFOUR	FIVEFOUR	FI
5	5	55	0.01818	0.03636	0.05455	0.07273	0.09091	0.10909	0.12727	0.14545	0.16364	0.1818	ODD	five	five	FIVEFIVE	FIVEFIVE	FI
5	6	56	0.01786	0.03571	0.05357	0.07143	0.08929	0.10714	0.12500	0.14286	0.16071	0.1786	EVEN	five	six	FIVESIX	FIVESIX	FI
5	7	57	0.01754	0.03509	0.05263	0.07018	0.08772	0.10526	0.12281	0.14035	0.15789	0.1754	ODD	five	seven	FIVESEVEN	FIVESEVEN	FI
5	8	58	0.01724	0.03448	0.05172	0.06897	0.08621	0.10345	0.12069	0.13793	0.15517	0.1724	EVEN	five	eight	FIVEEIGHT	FIVEEIGHT	FI
5	9	59	0.01695	0.03390	0.05085	0.06780	0.08475	0.10169	0.11864	0.13559	0.15254	0.1695	ODD	five	nine	FIVENINE	FIVENINE	FI
6	0	60	0.01667	0.03333	0.05000	0.06667	0.08333	0.10000	0.11667	0.13333	0.15000	0.1667	EVEN	six	zero	SIXZERO	SIXZERO	SI
6	1	61	0.01639	0.03279	0.04918	0.06557	0.08197	0.09836	0.11475	0.13115	0.14754	0.1639	ODD	six	one	SIXONE	SIXNOE	SI
6	2	62	0.01613	0.03226	0.04839	0.06452	0.08065	0.09677	0.11290	0.12903	0.14516	0.1613	EVEN	six	two	SIX TWO	SIX TWO	SI
6	3	63	0.01587	0.03175	0.04762	0.06349	0.07937	0.09524	0.11111	0.12698	0.14286	0.1587	ODD	six	three	SIXTHREE	SIXTHREE	SI
6	4	64	0.01563	0.03125	0.04688	0.06250	0.07813	0.09375	0.10938	0.12500	0.14063	0.1563	EVEN	six	four	SIXFOUR	SIXFOUR	SI
6	5	65	0.01538	0.03077	0.04615	0.06154	0.07692	0.09231	0.10769	0.12308	0.13846	0.1538	ODD	six	five	SIXFIVE	SIXFIVE	SI
6	6	66	0.01515	0.03030	0.04545	0.06061	0.07576	0.09091	0.10606	0.12121	0.13636	0.1515	EVEN	six	six	SIXSIX	SIXSIX	SI
6	7	67	0.01493	0.02985	0.04478	0.05970	0.07463	0.08955	0.10448	0.11940	0.13433	0.1493	ODD	six	seven	SIXSEVEN	SIXSEVEN	SI
6	8	68	0.01471	0.02941	0.04412	0.05882	0.07353	0.08824	0.10294	0.11765	0.13235	0.1471	EVEN	six	eight	SIXEIGHT	SIXEIGHT	SI
6	9	69	0.01449	0.02899	0.04348	0.05797	0.07246	0.08696	0.10145	0.11594	0.13043	0.1449	ODD	six	nine	SIXNINE	SIXNINE	SI
7	0	70	0.01429	0.02857	0.04286	0.05714	0.07143	0.08571	0.10000	0.11429	0.12857	0.1429	EVEN	seven	zero	SEVENZERO	SEVENZERO	SE
7	1	71	0.01408	0.02817	0.04225	0.05634	0.07042	0.08451	0.09859	0.11268	0.12676	0.1408	ODD	seven	one	SEVENONE	SEVENNOE	SE
7	2	72	0.01389	0.02778	0.04167	0.05556	0.06944	0.08333	0.09722	0.11111	0.12500	0.1389	EVEN	seven	two	SEVENTWO	SEVENTWO	SE
7	3	73	0.01370	0.02740	0.04110	0.05479	0.06849	0.08219	0.09589	0.10959	0.12329	0.1370	ODD	seven	three	SEVENTHREE	SEVENTHREE	SE
7	4	74	0.01351	0.02703	0.04054	0.05405	0.06757	0.08108	0.09459	0.10811	0.12162	0.1351	EVEN	seven	four	SEVENFOUR	SEVENFOUR	SE
7	5	75	0.01333	0.02667	0.04000	0.05333	0.06667	0.08000	0.09333	0.10667	0.12000	0.1333	ODD	seven	five	SEVENFIVE	SEVENFIVE	SE
7	6	76	0.01316	0.02632	0.03947	0.05263	0.06579	0.07895	0.09211	0.10526	0.11842	0.1316	EVEN	seven	six	SEVENSIX	SEVENSIX	SE
7	7	77	0.01299	0.02597	0.03896	0.05195	0.06494	0.07792	0.09091	0.10390	0.11688	0.1299	ODD	seven	seven	SEVENSEVEN	SEVENSEVEN	SE
7	8	78	0.01282	0.02564	0.03846	0.05128	0.06410	0.07692	0.08974	0.10256	0.11538	0.1282	EVEN	seven	eight	SEVENEIGHT	SEVENEIGHT	SE
7	9	79	0.01266	0.02532	0.03797	0.05063	0.06329	0.07595	0.08861	0.10127	0.11392	0.1266	ODD	seven	nine	SEVENNINE	SEVENNINE	SE
8	0	80	0.01250	0.02500	0.03750	0.05000	0.06250	0.07500	0.08750	0.10000	0.11250	0.1250	EVEN	eight	zero	EIGHTZERO	EIGHTZERO	EI
8	1	81	0.01235	0.02469	0.03704	0.04938	0.06173	0.07407	0.08642	0.09877	0.11111	0.1235	ODD	eight	one	EIGHTONE	EIGHTNOE	EI
8	2	82	0.01220	0.02439	0.03659	0.04878	0.06098	0.07317	0.08537	0.09756	0.10976	0.1220	EVEN	eight	two	EIGHTTWO	EIGHTTWO	EI
8	3	83	0.01205	0.02410	0.03614	0.04819	0.06024	0.07229	0.08434	0.09639	0.10843	0.1205	ODD	eight	three	EIGHTTHREE	EIGHTTHREE	EI
8	4	84	0.01190	0.02381	0.03571	0.04762	0.05952	0.07143	0.08333	0.09524	0.10714	0.1190	EVEN	eight	four	EIGHTFOUR	EIGHTFOUR	EI
8	5	85	0.01176	0.02353	0.03529	0.04706	0.05882	0.07059	0.08235	0.09412	0.10588	0.1176	ODD	eight	five	EIGHTFIVE	EIGHTFIVE	EI
8	6	86	0.01163	0.02326	0.03488	0.04651	0.05814	0.06977	0.08140	0.09302	0.10465	0.1163	EVEN	eight	six	EIGHTSIX	EIGHTSIX	EI
8	7	87	0.01149	0.02299	0.03448	0.04598	0.05747	0.06897	0.08046	0.09195	0.10345	0.1149	ODD	eight	seven	EIGHTSEVEN	EIGHTSEVEN	EI
8	8	88	0.01136	0.02273	0.03409	0.04545	0.05682	0.06818	0.07955	0.09091	0.10227	0.1136	EVEN	eight	eight	EIGHTEIGHT	EIGHTEIGHT	EI
8	9	89	0.01124	0.02247	0.03371	0.04494	0.05618	0.06742	0.07865	0.08989	0.10112	0.1124	ODD	eight	nine	EIGHTNINE	EIGHTNINE	EI
9	0	90	0.01111	0.02222	0.03333	0.04444	0.05556	0.06667	0.07778	0.08889	0.10000	0.1111	EVEN	nine	zero	NINEZERO	NINEZERO	NI
9	1	91	0.01099	0.02198	0.03297	0.04396	0.05495	0.06593	0.07692	0.08791	0.09890	0.1099	ODD	nine	one	NINEONE	NINENOE	NI
9	2	92	0.01087	0.02174	0.03261	0.04348	0.05435	0.06522	0.07609	0.08696	0.09783	0.1087	EVEN	nine	two	NINETWO	NINETWO	NI
9	3	93	0.01075	0.02151	0.03226	0.04301	0.05376	0.06452	0.07527	0.08602	0.09677	0.1075	ODD	nine	three	NINETHREE	NINETHREE	NI
9	4	94	0.01064	0.02128	0.03191	0.04255	0.05319	0.06383	0.07447	0.08511	0.09574	0.1064	EVEN	nine	four	NINEFOUR	NINEFOUR	NI
9	5	95	0.01053	0.02105	0.03158	0.04211	0.05263	0.06316	0.07368	0.08421	0.09474	0.1053	ODD	nine	five	NINEFIVE	NINEFIVE	NI
9	6	96	0.01042	0.02														

