

ECON 5006 HW1- Wei Ye

%Q1: Creat only income array

```
cash_flow(:,:,1)=[100000 72500 41000;125000 82500 43500;180000 89000 45900;300000 97000 105000];
```

%Create the saving array

```
cash_flow(:,:,2)=[35000 22500 1000;58800 31300 2300;112564 36564 3464;231291 43291 5291];
```

%Create the consumption array

```
cash_flow(:,:,3)=cash_flow(:,:,1)-cash_flow(:,:,2);
```

%Rename arrays

```
income=cash_flow(:,:,1);
```

```
saving=cash_flow(:,:,2);
```

```
consumption=cash_flow(:,:,3);
```

Once we created the above arrays, we then solve the following questions.

%Q2: Info about I2

```
I2=[income(:,2),saving(:,2),consumption(:,2)]
```

I2 = 5×3

72500	22500	50000
82500	31300	51200
89000	36564	52436
97000	43291	53709
105000	49980	55020

%Q3: Info all but for year 3-5

```
y3_5=[income(3:5,:),saving(3:5,:),consumption(3:5,:)]
```

y3_5 = 3×9

180000	89000	45900	112564	36564	3464 ...
300000	97000	49000	231291	43291	5291
425000	105000	53500	354980	49980	8480

%Q4:Derive the saving rate

```
sav_rate=saving./income
```

sav_rate = 5×3

0.3500	0.3103	0.0244
0.4704	0.3794	0.0529
0.6254	0.4108	0.0755
0.7710	0.4463	0.1080
0.8352	0.4760	0.1585

%Q5: Consumption rate

```
cons_rate=consumption./income
```

cons_rate = 5×3

0.6500	0.6897	0.9756
0.5296	0.6206	0.9471
0.3746	0.5892	0.9245
0.2290	0.5537	0.8920
0.1648	0.5240	0.8415

%Q6: Percentage of income of individual 2 and 3 w.r.t income of individual1

```
prop23_1=[income(:,2)./income(:,1),income(:,3)./income(:,1)]
```

```
prop23_1 = 5x2
0.7250    0.4100
0.6600    0.3480
0.4944    0.2550
0.3233    0.1633
0.2471    0.1259
```

General Questions:

1. How many individuals do we have? Ans: **3. Individual1, 2 and 3 respectively.**
2. How many years of the data? Ans: **5 years.**
3. How many variables? Ans: **3 variables. Income, savings, and consumption.**