

## Theo Andonyadis

This program loads a structure with 5 rows of 10 sample student test grades and prints them, each row corresponding with the grades of one student. The first 7 grades are quizzes, weighted at 25%, grades 8 and 9 are midterms, weighted at 40% total, and grade 10 is a final, weighted at 35%. The program finds the simple mean of each row and prints it, then applies the weighting distribution to calculate each student's grade and prints them.

### Part A

```
A= load("students.mat","students");
B= [A.students];
fprintf('\t%3d\t%3d\t%3d\t%3d\t%3d\t%3d\t%3d\t%3d\t%3d\t%3d\n', B')
```

100	90	95	80	100	100	90	95	93	94
75	60	40	45	60	65	70	75	90	79
85	90	80	75	100	60	90	84	86	88
40	100	100	64	90	70	90	88	76	89
60	65	70	73	75	80	85	88	90	100

### Part B

```
C= [sum(B(1,:))/10, sum(B(2,:))/10, sum(B(3,:))/10, sum(B(4,:))/10, sum(B(5,:))/10];
%or mx=mean(x,2);
fprintf('%.2f\n', C)
```

```
93.70
65.90
83.80
80.70
78.60
```

### Part C

```
S1= 0.25*sum(B(1,1:7))/7 + 0.4*sum(B(1,8:9))/2 + 0.35*sum(B(1,10));
S2= 0.25*sum(B(2,1:7))/7 + 0.4*sum(B(2,8:9))/2 + 0.35*sum(B(2,10));
S3= 0.25*sum(B(3,1:7))/7 + 0.4*sum(B(3,8:9))/2 + 0.35*sum(B(3,10));
S4= 0.25*sum(B(4,1:7))/7 + 0.4*sum(B(4,8:9))/2 + 0.35*sum(B(4,10));
S5= 0.25*sum(B(5,1:7))/7 + 0.4*sum(B(5,8:9))/2 + 0.35*sum(B(5,10));
D= [S1, S2, S3, S4, S5];
%OR M=mean(x(:,1:7),2)*0.25 ...
%fprintf('%4.2f\n',M)
fprintf('%.2f\n', D)
```

```
93.89
75.47
85.51
83.74
88.74
```