

```
warning('off','all')

%Read data from excel
result = readtable('MCS_3.1.xlsx');
% Write the table to a CSV file
writetable(result, 'MCS_3.1.csv');
studentinfo = table2array(result(:,[1,2]));
%studentinfo = table2array(readtable('MCS_3.1.xlsx','Range','A2:B169'));
scores = table2array(readtable('MCS_3.1.xlsx','Range','C2:G169'));
units = string(result.Properties.VariableNames(3:end));

%input the reg number
reg = input('Enter the registration number for students:','s');
%prints transcript
fprintf("\tSTUDENT'S TRANSCRIPT\n")
```

STUDENT'S TRANSCRIPT

```
printTranscript(scores,reg,units,studentinfo);
```

Student Name: Kiprotich Denis

Registration Number: SCM211-0749/2019

UNITS	SCORES	GRADE
ODE	100	A
TimeSeriesAnalysis1	55	C
ScientificComputing	43	D
ComputerNetworks	84	A
OperationResearch	90	A

```
%print average and grading per unit
fprintf('\n\n')
fprintf("\t\tMEAN PER UNIT\n\n")
```

MEAN PER UNIT

```
fprintf('%-30s%-20s%\n', ' UNITS ', ' AVERAGE ', ' GRADE ');
```

```
UNITS AVERAGE GRADE

for j=1:length(units)
    fprintf('%-30s%-30.2f%-15s\n',units(j),mean(scores(:,j)),grade(mean(scores(:,j))));
end
```

UNITS	AVERAGE	GRADE
ODE	67.90	B
TimeSeriesAnalysis1	69.06	B
ScientificComputing	70.22	A
ComputerNetworks	71.18	A
OperationResearch	67.85	B

```
%print the table Result
fprintf("\t\tSTUDENT\ 'S DATA\n\n")
```

STUDENT'S DATA

```
% Get the size of the table
[numRows, numCols] = size(result);

% Define the fixed width for columns
columnWidth = 30;

% Print the column headers with fixed width
for j = 1:numCols
    if j == 1
        fprintf('%-20s', result.Properties.VariableNames{j}); % First column
    else
        fprintf('%-30s', result.Properties.VariableNames{j}); % Subsequent
    end
end
```

S\_NO

Names

ODE

TimeSeriesAnalysis1

ScientificComput

```
fprintf('\n');

% Nested for loops to iterate through each element of the table
for i = 1:numRows
    for j = 1:numCols
        % Access the element at (i, j)
        element = result{i, j};

        % Print the element with fixed width
        if j == 1
            fprintf('%-20s', string(element)); % First column width
        else
            fprintf('%-30s', string(element)); % Subsequent columns width
        end
    end
    fprintf('\n');
end
```

SC261-0953/2014			
Mwangi B Muriithi	63	56	97
SC261-4631/2012			
Oswago Solomon Otieno	79	44	61
SCM211-0182/2019			
Ngoma Kudunda Stauffer	75	54	82
SCM211-0183/2019			
Kathare Dorcas Kendi	76	42	77
SCM211-0184/2019			

Kiyai C Faith	59	51	87
scm211-0185/2019			
Kiplimo Luis	81	90	82
scm211-0186/2019			
Gichohi Mary Wanjiru	78	44	97
SCM211-0187/2019			
Ddaiddo Shirley Mbeyu	67	58	81
scm211-0188/2019			
Ngari Dennis Mathari	78	80	82
SCM211-0189/2019			
Wairagu Wanjiru Paulet Serah	75	59	51
SCM211-0190/2019			
Njuguna Yvonne Mary Mugure	60	73	48
SCM211-0191/2019			
Sophia Njeri Kogi	71	44	63
SCM211-0192/2019			
Kirimi Sharon Mwendwa	48	91	68
SCM211-0193/2019			
Kimani Abigael Mumbi	59	68	92
SCM211-0194/2019			
Muchiiri Kamande Francis	55	43	97
SCM211-0195/2019			
Kipsang Marion Cherotich	45	90	67
SCM211-0197/2019			
Nduku George Karanja	86	86	71
SCM211-0198/2019			
Claudette Chepkirui Rutoh	63	50	47
SCM211-0199/2019			
Kamau Joseph Mwangi	91	46	66
SCM211-0200/2019			
Muchai Joseph Kinuthia	55	41	43
scm211-0201/2019			
Benson Wambua	49	81	50
SCM211-0202/2019			
Wambua Bonface Mboya	79	82	43
scm211-0203/2019			
Ilako Halfamaton Ngesu	77	86	42
SCM211-0204/2019			
Laitete Emmaculate Sintoya	64	88	86
SCM211-0205/2019			
Muoki Ashley Mbeke	58	94	59
SCM211-0206/2019			
Samuel Gregory Muthui	57	57	98
scm211-0207/2019			
Samuel Musyimi	57	42	52
SCM211-0208/2019			
Nzambi Grace Mutethya	89	48	91
SCM211-0209/2019			
Shariff Abdi Dakane	75	46	96
SCM211-0210/2017			
Njoroge M Maina	73	79	47
SCM211-0210/2019			
Lillian Njeri Warui	58	89	63
SCM211-0211/2019			
Jacob Mutharimi George	93	41	85
SCM211-0213/2017			
Kaumo Shadrack Ngui	68	79	88
SCM211-0213/2019			
Mwinzi Christopher Mutati	51	48	100
SCM211-0214/2019			
Muthoki Sharon	91	94	52
SCM211-0215/2019			
Thomas Christine Mbili	91	75	60
SCM211-0216/2019			

Munguti Mike Mulei	41	72	65
SCM211-0217/2019			
Munyaka Dennis Musembi	61	50	55
SCM211-0218/2019			
Nyabaga Vanessa Nyatuga	80	52	76
SCM211-0219/2019			
Bundi Christine Kinya	60	90	57
SCM211-0220/2019			
Mbae Japheth Karani	50	79	80
SCM211-0221/2019			
Wenani Henry	64	77	90
SCM211-0222/2019			
Chelsea Njeri Kariuki	41	96	56
SCM211-0224/2019			
Kaiga Stephen Githinji	91	69	49
SCM211-0225/2019			
Naika Lucianne Wambui	98	46	63
SCM211-0226/2019			
Rutto Caren Jerop	96	57	90
SCM211-0227/2019			
Atieno Rufina	80	97	46
SCM211-0228/2019			
Kioko Alexander	72	65	82
SCM211-0230/2019			
Ndemo Nancy Nyanduko	58	79	60
SCM211-0231/2019			
Roy Liyai Bandi	96	85	62
SCM211-0232/2019			
Kariuki Elizabeth Wanjiru	80	82	89
SCM211-0233/2019			
Muthengia Maxwell Githumbi	74	85	51
SCM211-0234/2019			
Ngubo Benson Momanyi	97	49	83
SCM211-0235/2019			
Simiyu Samuel Wamboo	56	91	69
SCM211-0236/2018			
Jacob Joseph Mukula	81	44	95
SCM211-0236/2019			
Otieno Sara Achieng	49	74	71
SCM211-0237/2017			
Kiplagat Meshack Kiprono	74	52	77
SCM211-0237/2019			
Macharia Allan Kariuki	72	45	55
SCM211-0238/2019			
James Nginya	77	93	43
SCM211-0239/2019			
Kibet Kevin Kipkemboi	48	76	77
SCM211-0240/2019			
Macharia Christopher Maina	90	46	83
SCM211-0241/2019			
Muchori Phyllis Stacy Muthoni	53	65	71
SCM211-0242/2019			
Ndiritu Denis Mwai	97	62	96
SCM211-0243/2018			
Mutinda Johnes Maweu	73	95	64
SCM211-0243/2019			
Ngunu Ceasar Njuguna	41	72	52
SCM211-0244/2019			
Okongo Austine Okoth	81	42	89
SCM211-0245/2019			
Mwangi Peter Chege	40	89	88
SCM211-0246/2019			
Too Daniel Kipngetich	62	60	80
SCM211-0247/2019			

Erissat Allan Okedo	53	95	78
SCM211-0248/2019			
Maina Muthoni Melinda	66	63	40
SCM211-0249/2019			
Mwaniki Nancy Wangui	93	99	87
SCM211-0250/2019			
Maina Nancy Wambui	40	52	53
SCM211-0251/2019			
John Igwanya	91	56	43
SCM211-0252/2019			
Carolyn Wanjiru Njoroge	51	49	60
SCM211-0253/2019			
Ngugi Patience Wangui	80	57	43
SCM211-0254/2019			
Gitonga Dennis Kamau	61	86	78
scm211-0255/2019			
Lopeyok Patrick Ngolokan	45	75	58
scm211-0256/2019			
Kipngeno Kelvin	72	90	69
SCM211-0257/2017			
Nyagah Kelvin	99	90	90
SCM211-0257/2019			
Ndegwa Mike Munene	83	76	46
SCM211-0259/2019			
Wang`ombe Joseph Mwangi	49	47	86
SCM211-0260/2019			
Wahome John Nyaga	48	58	48
SCM211-0261/2019			
Munyekenye Awino Winfresher	94	55	63
SCM211-0262/2019			
Robert W Barasa	46	62	64
SCM211-0263/2019			
Bosibori Peris Oseko	99	62	89
SCM211-0264/2019			
Maulidi Hassan Namte	48	94	85
SCM211-0265/2019			
Otieno Samwel Okeyo	75	85	89
SCM211-0266/2019			
Ngare K Rebecca Mitchelle	55	61	94
SCM211-0267/2019			
Oluchiri Patrick Lumumba	89	85	77
SCM211-0268/2019			
Amukhoye Simon	53	44	40
SCM211-0269/2019			
Mutete Sydlik Tola	99	96	74
SCM211-0271/2019			
Otieno Cynthia Awuor	44	51	100
SCM211-0272/2019			
Omwenga Edwin Ratemo	69	69	41
SCM211-0273/2019			
Odhiambo Robinson S Okeyo	43	60	66
SCM211-0274/2018			
Amon Kipkogei Kurgat	97	69	73
SCM211-0274/2019			
Otwori Isaac Moindi	79	93	53
SCM211-0275/2019			
Elly James Komunga	75	62	98
SCM211-0276/2019			
Juma Gideon Yuri Ochieng	88	97	72
SCM211-0277/2019			
Otieno Frankline Otieno	96	44	71
SCM211-0278/2019			
Okumu Nashon Omondi	77	83	59
SCM211-0280/2019			

Nyangige Daniel Junior SCM211-0281/2019	41	67	89
Boke Elishaphat Chacha SCM211-0282/2019	45	88	64
Ogutu Fredrick Okeyo SCM211-0288/2018	62	48	55
Opondo Vivian Adhiambo SCM211-0347/2016	49	47	52
Nyaosi Nyanchama SCM211-0409/2016	48	92	43
Okora Dancan SCM211-0607/2019	54	45	90
Tom Odhiambo SCM211-0609/2019	53	83	62
Kirui Shimron Kipyator SCM211-0610/2019	91	81	81
Wahome Kezia Wangechi SCM211-0611/2019	83	80	59
Ngugi Dellis Marandi SCM211-0612/2019	48	89	93
Igamba Daisy Mukami SCM211-0613/2019	51	71	74
Muthoni Joseph Thuku SCM211-0614/2019	51	59	77
Silas Otieno Ogot SCM211-0615/2019	74	54	69
Kiplimo Kiplagat Edwin SCM211-0616/2019	55	84	67
Odera Enos Meneffee scm211-0617/2019	96	55	71
Kipyegon Amos Bett SCM211-0618/2019	64	58	58
Kangangi Joy Wanjiku SCM211-0619/2019	41	77	53
Marura Dennis Ondiek SCM211-0680/2019	55	78	41
Raymond Chege Maina SCM211-0683/2019	47	83	65
Otieno Opondo Luke SCM211-0686/2017	71	87	90
Muturi Derrick SCM211-0724/2018	76	47	90
Kirika Saraphinah Njeri SCM211-0747/2018	66	65	71
Kariuki Brian Muthaithi SCM211-0749/2019	40	49	50
Kiprotich Denis SCM211-0750/2019	100	55	43
Ngonyo Laura Njeri SCM211-0751/2019	93	84	53
Ngotho Anthony Mwangi SCM211-0752/2019	69	68	62
Atunga Elijah Mbeki SCM211-0753/2019	40	86	61
Timothy Ramadhan Kavaya SCM211-0754/2019	41	65	90
Ondara Hesbon Nyambane SCM211-0755/2019	77	63	54
Onkui Gifty Kerubo SCM211-0756/2019	48	94	72
Murithi K Ian SCM211-0757/2019	45	62	41
Kinyanjui Joseph Ngahu SCM211-0758/2019	43	86	62

Kimokiy Jelel Faith SCM211-0759/2019	88	40	100
Ntonja Elijah Mutethia SCM211-0760/2019	96	69	58
Daniel Njeru Kariuki SCM211-0761/2019	52	47	80
Mbugua J. Wangari SCM211-0762/2019	43	99	72
Denis Kiplangat Kogo SCM211-0763/2019	50	86	44
Mbau Martin Gichuki SCM211-0764/2019	60	49	99
Ondenyi Ombesta Nicholus SCM211-0765/2019	89	44	75
Otieno Leah Gloria SCM211-0766/2019	69	54	75
Gakuya Pennina Nyawira SCM211-0767/2019	77	92	66
Ngugi Felix Thuo SCM211-0768/2019	92	40	70
Machoni Onchari Haron SCM211-0773/2018	98	63	90
Kiprop Emmanuel SCM211-0785/2019	54	52	74
Kivayilu Meshackingaiza SCM211-0787/2019	79	87	80
Kawala Ephraim Ochieng SCM211-0790/2019	54	87	56
Muema Joel Mutinda SCM211-0794/2019	63	89	77
Nassir Muhammed Doffa SCM211-0795/2019	63	77	83
Maxwell Newton Murithi SCM211-0796/2019	91	79	41
Gichana Eric Nyaega SCM211-0837/2018	80	64	44
Kaluku Bruce Nungu SCM211-0843/2018	76	74	89
Muguna Lewis SCM211-0869/2018	87	69	87
Kithaka Charity Wanjiku SCM211-0870/2018	40	91	96
Muriithi Anthony Mwangi SCM221-0620/2018	88	44	48
Mwangi Ben Ruwel Mugwe SCM221-2107/2015	65	87	92
James Njenga SCM211-0681/2018	79	53	94
William Mwendwa Nzuli SCM211-0293/2018	71	46	55
Erick Ochieng Obuya SCM211-0263/2018	89	97	77
Peter Nyanza Isabwa SCM221-0953/2014	60	84	61
Mwangi B. Muriithi SCM211-0401/2016	53	75	99
Solomon Khaluhi SCM211-0298/2018	50	56	70
Janam Ouko SCM211-0243/2017	51	50	86
Nam Vincent Aburili SCM211-0549/2017	76	91	69
Ochango Edwin Temba SCM211-0208/2018	55	83	61

Karani Francis Machine	58	67	99
SCM211-0596/2017			
Kibe Benard Thairu	65	58	81
SCM211-1781/2015			
Benson Mutembei Gitonga	52	87	61
SCM211-0258/2017			
TOM Kipkurui	93	82	64

```
function [] = printTranscript(scores,reg,units,studentinfo)
    for i=1:length(string(studentinfo(:,1)))
        if strcmp(string(studentinfo(i,1)), reg)
            fprintf('%s: %s\n\n%s:
%s\n\n', 'Student Name', string(studentinfo(i,2)), 'Registration
Number', string(studentinfo(i,1)));
            fprintf('%-30s%-30s%-30s\n', 'UNITS', 'SCORES', 'GRADE');
            for k=1:length(units)
                fprintf('\n%-40s %-40d
%-10s\n', units(k), scores(i,k), grade(scores(i,k)));
            end
            break
        end
    end
end

%grading the scores
function grd = grade(scores)
    if scores>=70
        grd = 'A';
    elseif scores>=60
        grd = 'B';
    elseif scores>=50
        grd = 'C';
    elseif scores>=40
        grd = 'D';
    else
        grd = 'E';
    end
end
```