

```
%measure of central tendency
%mean
Numerical_Analysis_mean=mean(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_mean = 75.4846
```

```
ODE_mean=mean(classlist.ODE)
```

```
ODE_mean = 63.9308
```

```
Computational_math_mean=mean(classlist.ComputationalMath)
```

```
Computational_math_mean = 67.5846
```

```
Real_Analysis_mean=mean(classlist.RealAnalysis)
```

```
Real_Analysis_mean = 65.1154
```

```
Fluid_mechanics_mean=mean(classlist.FluidMechanics)
```

```
Fluid_mechanics_mean = 68.1154
```

```
Computer_graphics_mean=mean(classlist.ComputerGraphics)
```

```
Computer_graphics_mean = 67.2385
```

```
Linear_Algebra_mean=mean(classlist.LinearAlgebra)
```

```
Linear_Algebra_mean = 66.6308
```

```
TOE_mean=mean(classlist.TOE)
```

```
TOE_mean = 66.1385
```

```
%median
Numerical_Analysis_median=median(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_median = 75
```

```
ODE_median=median(classlist.ODE)
```

```
ODE_median = 65
```

```
Computational_math_median=median(classlist.ComputationalMath)
```

```
Computational_math_median = 68
```

```
Real_Analysis_median=median(classlist.RealAnalysis)
```

```
Real_Analysis_median = 65
```

```
Fluid_mechanics_median=median(classlist.FluidMechanics)
```

```
Fluid_mechanics_median = 70
```

```
Computer_graphics_median=median(classlist.ComputerGraphics)
```

```
Computer_graphics_median = 66
```

```
Linear_Algebra_median=median(classlist.LinearAlgebra)
```

```
Linear_Algebra_median = 66
```

```
TOE_median=median(classlist.TOE)
```

```
TOE_median = 66
```

```
%mode
```

```
Numerical_Analysis_mode=mode(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_mode = 71
```

```
ODE_mode=mode(classlist.ODE)
```

```
ODE_mode = 36
```

```
Computational_math_mode=mode(classlist.ComputationalMath)
```

```
Computational_math_mode = 48
```

```
Real_Analysis_mode=mode(classlist.RealAnalysis)
```

```
Real_Analysis_mode = 38
```

```
Fluid_mechanics_mode=mode(classlist.FluidMechanics)
```

```
Fluid_mechanics_mode = 73
```

```
Computer_graphics_mode=mode(classlist.ComputerGraphics)
```

```
Computer_graphics_mode = 41
```

```
Linear_Algebra_mode=mode(classlist.LinearAlgebra)
```

```
Linear_Algebra_mode = 80
```

```
TOE_mode=mode(classlist.TOE)
```

```
TOE_mode = 65
```

```
%measure of dispersion
```

```
%standard deviation
```

```
Numerical_Analysis_std=std(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_std = 8.7216
```

```
ODE_std=std(classlist.ODE)
```

```
ODE_std = 19.4351
```

```
Computational_math_std=std(classlist.ComputationalMath)
```

```
Computational_math_std = 18.1077
```

```
Real_Analysis_std=std(classlist.RealAnalysis)
```

```
Real_Analysis_std = 18.4868
```

```
Fluid_mechanics_std=std(classlist.FluidMechanics)
```

```
Fluid_mechanics_std = 18.0901
```

```
Computer_graphics_std=std(classlist.ComputerGraphics)
```

```
Computer_graphics_std = 19.2977
```

```
Linear_Algebra_std=std(classlist.LinearAlgebra)
```

```
Linear_Algebra_std = 18.4147
```

```
TOE_std=std(classlist.TOE)
```

```
TOE_std = 19.0645
```

```
%variance
```

```
Numerical_Analysis_var=var(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_var = 76.0657
```

```
ODE_var=var(classlist.ODE)
```

```
ODE_var = 377.7239
```

```
Computational_math_var=var(classlist.ComputationalMath)
```

```
Computational_math_var = 327.8881
```

```
Real_Analysis_var=var(classlist.RealAnalysis)
```

```
Real_Analysis_var = 341.7618
```

```
Fluid_mechanics_var=var(classlist.FluidMechanics)
```

```
Fluid_mechanics_var = 327.2501
```

```
Computer_graphics_var=var(classlist.ComputerGraphics)
```

```
Computer_graphics_var = 372.4001
```

```
Linear_Algebra_var=var(classlist.LinearAlgebra)
```

```
Linear_Algebra_var = 339.1029
```

```
TOE_var=var(classlist.TOE)
```

```
TOE_var = 363.4535
```

```
%range
```

```
Numerical_Analysis_range=range(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_range = 30
```

```
ODE_range=range(classlist.ODE)
```

```
ODE_range = 63
```

```
Computational_math_range=range(classlist.ComputationalMath)
```

```
Computational_math_range = 63
```

```
Real_Analysis_range=range(classlist.RealAnalysis)
```

```
Real_Analysis_range = 63
```

```
Fluid_mechanics_range=range(classlist.FluidMechanics)
```

```
Fluid_mechanics_range = 62
```

```
Computer_graphics_range=range(classlist.ComputerGraphics)
```

```
Computer_graphics_range = 63
```

```
Linear_Algebra_range=range(classlist.LinearAlgebra)
```

```
Linear_Algebra_range = 62
```

```
TOE_range=range(classlist.TOE)
```

```
TOE_range = 63
```

```
%interquatile range
```

```
Numerical_Analysis_iqr=iqr(classlist.NumericalAnalysis)
```

```
Numerical_Analysis_iqr = 14
```

```
ODE_iqr=iqr(classlist.ODE)
```

```
ODE_iqr = 34
```

```
Computational_math_iqr=iqr(classlist.ComputationalMath)
```

```
Computational_math_iqr = 32
```

```
Real_Analysis_iqr=iqr(classlist.RealAnalysis)
```

```
Real_Analysis_iqr = 32
```

```
Fluid_mechanics_iqr=iqr(classlist.FluidMechanics)
```

```
Fluid_mechanics_iqr = 31
```

```
Computer_graphics_iqr=iqr(classlist.ComputerGraphics)
```

```
Computer_graphics_iqr = 33
```

```
Linear_Algebra_iqr=iqr(classlist.LinearAlgebra)
```

```
Linear_Algebra_iqr = 34
```

```
TOE_iqr=iqr(classlist.TOE)
```

```
TOE_iqr = 34
```

```
%test for uniformity in the data set
%numerical analysis uniformity
Numerical_Analysis_Uniformity=classlist.NumericalAnalysis;
[h1,p1]=chi2gof(Numerical_Analysis_Uniformity)
```

```
h1 = 1
p1 = 0.0196
```

```
if h1==0
    fprintf("uniform distribution with pvalue=p1%0.7f\n",pi)
else
    fprintf("not uniform with pvalue=p1%0.7f.\n",p1)
end
```

```
not uniform with pvalue=p10.0195794.
```

```
%ODE uniformity
ODE_Uniformity=classlist.ODE;
[h1,p1]=chi2gof(ODE_Uniformity)
```

```
h1 = 1
p1 = 0.0083
```

```
if h1==0
    fprintf("uniform distribution with pvalue=p1%0.7f\n",pi)
else
    fprintf("not uniform with pvalue=p1%0.7f.\n",p1)
end
```

```
not uniform with pvalue=p10.0083132.
```

```
%Computational math uniformity
Computational_math_Uniformity=classlist.ComputationalMath;
[h2,p2]=chi2gof(Numerical_Analysis_Uniformity)
```

```
h2 = 1
p2 = 0.0196
```

```
if h2==0
    fprintf("uniform distribution with pvalue=p1%0.7f\n",pi)
else
    fprintf("not uniform with pvalue=p1%0.7f.\n",p2)
end
```

```
not uniform with pvalue=p10.0195794.
```

```
S1=classlist(50,:)
```

```
S1 = 1x11 table
```

...

	NO	RegNumber	Name	NumericalAnalysis
1	50	"SCM211-0330/2021"	"Njinu Dennis Ngugi"	77

