

Matlab assignment -01

Q1.

```
R=20;           % define radius of circle
a=PI*R^2;       % Area of the circle
C=2*pi*R;       % circumference
```

Q2.

```
x=9*(sqrt(8)-(2/(sqrt(8)+2)^2))-5;
```

Q3.

```
X=(sin(pi/9))^2 + (cos(pi/9)^2);
X;
```

Q4.

```
cel=input("Enter temperature in celcius ");
fah=32+(9*cel/5);
fah;
```

Q5.

```
ones(1:10,1:10)=0.5;
ones;
```

Q6.

```
row=input("Enter your matrix row no. ");
col=input("Enter your matrix column no. ");
input_mat=rand(row,col)*100;
```

Q7.

```
m=input('marks of quiz 1 : ');
n=input('marks of mid sem : ');
o=input('marks of quiz 2 : ');
p=input('marks of end sem : ');
q=input('marks of lab work : ');
s=input('marks of projects : ');

gpa=0.1*((m/20*5+n/50*20+o/20*5+p/100*30+q/100*20+s/50*20));
disp(["GPA is : " num2str(gpa)]);
```

Q8.

```
matx=randi([50,100],3,3);  
matx_3=matx-3;  
matx_3p=matx/3;  
d=matx_3+matx_3p;  
k=d^2;
```

Q9.

```
I=eye(2,2);  
a=[0;0];  
c0=cat(2,I,a);  
new=[0 0 1];  
c1=cat(1,c0,new);
```

Q10.

```
i=randi([0,100],3,3);  
b1=i+1;  
b2=i-1;
```