Name: MAJJIGA JASWANTH

Registration number: 20BCD7171

Course: mat1001

CODE 1

```
clc
clear all
syms x y z t
f = x-3*(y^2) +z;
var=[x,y,z];
par=[t,t,t];
F=subs(f,var,par);
dr=[diff(par(1),t),diff(par(2),t),diff(par(3),t)];
modr = norm(dr);
I = int(F*modr,t,0,1);
fprintf('20BCD7171 MAJJIGA JASWANTH \n')
disp('Line integral along the given curve is')
disp(I)
```

Command window

```
20BCD7171 MAJJIGA JASWANTH
Line integral along the given curve is
0
```

Code2

```
%c
%clear all
syms t
x = t^2;
y = t;
z = sqrt(t);
f = [z,x*y,-(y^2)];
r = [x,y,z];
dr = [diff(r(1),t),diff(r(2),t),diff(r(3),t)];
F = dot(f,dr);
I = int(F,t,0,1);
fprintf('20BCD7171 MAJJIGA JASWANTH \n')
disp('Line integral along the given curve is')
disp(I)
```

Command window

```
>> mat41
20BCD7171 MAJJIGA JASWANTH
Line integral along the given curve is
17/20
```