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Problem set 3

```
clear all; close all; clc;
```

3.1.a.)

```
%Stanford is located at
geolat = 37.4226 *pi/180    %[rad]
lon = -122.1654 *pi/180    %[rad]
alt = -9/1E3;    %[km]

[x y z] = Geodetic_To_ECEF(geolat, lon, alt)
```

```
geolat =
```

```
0.653147584656830
```

```
lon =
```

```
-2.132188462015880
```

```
x =
```

```
-2.699955191921852e+03
```

```
y =
```

```
-4.293203518465034e+03
```

```
z =
```

```
3.854739908494671e+03
```

3.1.b.)

```
[gdlat lon alt] = ECEF_To_Geodetic(x, y, z)
```

```
gdlat =
```

0.653147584656826

lon =

-2.132188462015881

alt =

-0.0090000000000015