

```
In [1]: import numpy as np
        from scipy import stats
        from scipy.stats import norm
```

```
In [2]: # Apply One-Sample One-Tail z-test
```

```
In [3]: z_scores=(0.046-0.05)/(np.sqrt((0.05*(1-0.05))/2000))
        z_scores
```

```
Out[3]: -0.820782681668124
```

```
In [4]: # Find Probability assuming null hyposthesis, so as to compare with Type-1 error
```

```
In [5]: p_value=1-stats.norm.cdf(abs(z_scores))
        p_value
```

```
Out[5]: 0.20588503245107104
```

```
In [ ]:
```