PROBLEM

The following data represent lifevtime in hour of battery for two different rank A and rank B

40,30,40,45,55,30

50,50,45,55,60,40

test whether these two rank differ with respect to average life

$D_{6,6,0.05}$ =4/6

$t_{10,0.05}$ =2.2281 .

SOLUTION:-

H_0 : Life time of two different brand of baterry are not different

H1 : life time of two different brand of battery are different

```
> x=c(40,30,40,45,55,30)
> x
[1] 40 30 40 45 55 30
> y=c(50,50,45,55,60,40)
> y
[1] 50 50 45 55 60 40
> z=ks.test(x,y)
> z


        Exact two-sample
        Kolmogorov-Smirnov test

data:  x and y
D = 0.5, p-value = 0.4156
alternative hypothesis: two-sided
```

CONCLUSION:-

Here we can cobclude that the value of p* is less than the value of α (p*<α).

So we fail to reject the null hypothesis and we can say that the life of two different brand of battery are not different.