

NAME- SHREYASH R GUPTA

ROLL- 57 TE/A

SUB – DWM

EXPERIMENT 8

KMeans

```
#include<stdio.h>
```

```
#include<math.h>
```

```
void clustering(int array[],int x,int c1,int c2,int cluster1[],int cluster2[])
```

```
{
```

```
int cl1=0,cl2=0;
```

```
for(int i=0;i<x;i++){
```

```
int d1=sqrt(pow(c1-array[i],2));
```

```
int d2=sqrt(pow(c2-array[i],2));
```

```
if(d1<d2){
```

```
cluster1[cl1]=array[i];
```

```
cl1++;
```

```
}
```

```
else{
```

```
cluster2[cl2]=array[i];
```

```
cl2++;
```

```
}
```

```
}
```

```
printf("CLUSTER 1\n");
```

```
for(int i=0;i<cl1;i++){
```

```
printf("%d ",cluster1[i]);
```

```
}
```

```
printf("\nCLUSTER 2\n");
```

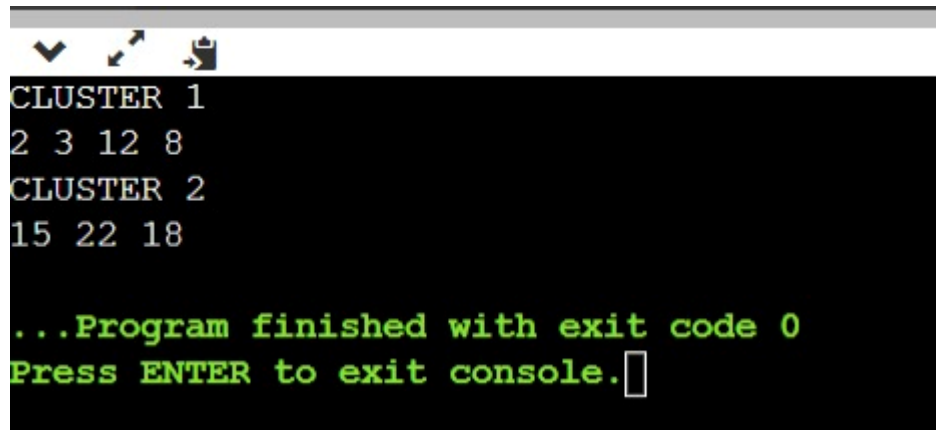
```
for(int i=0;i<cl2;i++){
```

```
printf("%d ",cluster2[i]);
```

```
}
```

```
}
```

```
void main(){  
    int array[7]={2,3,12,8,15,22,18};  
    int cluster1[7];  
    int cluster2[7];  
    int c1=12;  
    int c2=18;  
    clustering(array,7,12,18,cluster1,cluster2);  
}
```



```
CLUSTER 1  
2 3 12 8  
CLUSTER 2  
15 22 18  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```