

Script started on 2020-03-29 21:10:46+0530

Harshini@Harshini [00m: [01;34m~/Desktop/threa \$gcc thread.c -o -t -lpthread

Harshini@Harshini [00m: [01;34m~/Desktop/threa \$ cat thread.c

```
#include<pthread.h>
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int max, min, l;
float avg;
int list[10];
void *Max(void *param);
void *Min(void *param);
void *Avg(void *param);
int main(int argc, char *argv[])
{
    pthread_t tid1, tid2, tid3;
    pthread_attr_t attr1, attr2, attr3;
    if (argc < 2)
    {
        fprintf(stderr,"Usage: Enter list of integer values\n");
        return -1;
    }
    for(int i = 1; i < argc; i++)
        list[i-1] = atoi(argv[i]);
    l = argc - 1; // no of arguments
    pthread_attr_init(&attr1);
    pthread_attr_init(&attr2);
    pthread_attr_init(&attr3);
    pthread_create(&tid1,&attr1,Max, list);
    pthread_create(&tid2,&attr2,Min, list);
    pthread_create(&tid3,&attr3,Avg, list);
    pthread_join(tid1,NULL);
    pthread_join(tid2,NULL);
    pthread_join(tid3,NULL);
    printf("Maximum : %d\t Minimum : %d\t Average: %f\n",max,min,avg);
}
void *Max(void *param)
{
    max = list[0];
    for(int i = 1; i < l; i++)
    {
        if(max < list[i]) max = list[i];
    }
}
```

```

        pthread_exit(0);
    }
    void *Min(void *param)
    {
        min = list[0];
        for(int i = 1; i < l; i++)
        {
            if(min > list[i]) min = list[i];
        }
        pthread_exit(0);
    }
    void *Avg(void *param)
    {
        avg = 0;
        for(int i = 0; i < l; i++)
        {
            avg += list[i];
        }
        avg /= l;
        pthread_exit(0);
    }

```

```

Harshini@Harshini [00m: [01;34m~/Desktop/threa $ ./t 2 9 8 199 -1 93 0 49
Maximum : 199      Minimum : -1  Average: 44.875000
Harshini@Harshini [00m: [01;34m~/Desktop/threa [00m$ exit
exit

```

Script done on 2020-03-29 21:11:24+0530