

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

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

GAYU@GAYU [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);
}
```

GAYU@GAYU [00m: [01;34m~/Desktop/threa \$./t 2 9 8 199 -1 93 0 49

Maximum : 199 Minimum : -1 Average: 44.875000

GAYU@GAYU [00m: [01;34m~/Desktop/threa [00m\$ exit
exit

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