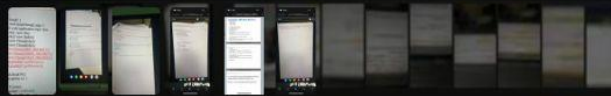
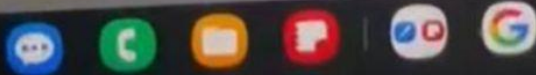


2. For the given parallel program, set the priority of the threads to MAX, MIN and NORMAL and display the results with different priorities. (3 Marks) (CLO 1-2)

```
public class Tread2 {  
    public static void main(String[] args) {  
        // TODO code application logic here  
        Runnable obj1=new Hij;  
        Runnable obj2=new Helloj;  
        Thread t1=new Thread(obj1);  
        Thread t2=new Thread(obj2);  
  
        _____  
  
        _____  
  
        System.out.println(t1.getPriority());  
        System.out.println(t2.getPriority());  
        t1.start();  
        try{ Thread.sleep(10);  
            catch(Exception e){}  
        t2.start();  
        t1.join(); t2.join();  
        System.out.println(t1.isAlive());  
        System.out.println("Bye"); }  
}
```



```
t1.setPriority(Thread.MAX_PRIORITY); //10  
    t2.setPriority(Thread.MIN_PRIORITY); //1  
    t1.setPriority(Thread.NORM_PRIORITY); //5
```

3. Given **Two** processes in the MPI COMM WORLD. Write an MPI program to send data containing 100 from process 0 to process 1 using MPI\_Send and MPI\_Recieve functions. Also display the results (3 Marks) [CLO 2.1]



```

#include "stdafx.h" //reduces compile time and Unnecessary Processing
#include <stdio.h> //contains built-in functions such as printf
#include <mpi.h>
#include <iostream>

int main(void) {
    int comm_sz;
    int my_rank;
    int data = 0;
    MPI_Init(NULL, NULL);
    MPI_Comm_size(MPI_COMM_WORLD, &comm_sz);
    MPI_Comm_rank(MPI_COMM_WORLD, &my_rank);
    if (my_rank == 0) {
        data = 100;
        MPI_Send(&data, 1, MPI_INT, 1, 0, MPI_COMM_WORLD);
    }
    else if (my_rank == 1) {
        MPI_Recv(&data, 1, MPI_INT, 0, 0, MPI_COMM_WORLD, MPI_STATUS_IGNORE);
        printf("Process %d received %d from process 0\n", my_rank, data);
    }

    MPI_Finalize();
    return 0;
}

```

Output:

Process 1 received 100 from process 0