```c
#include<stdio.h>

#include<semaphore.h>

#include<windows.h>

sem_t s;

void intro();

void singleplayer();

void multiplayer();

void intro()

{

        int l;

        printf("\n\nBy Rishav Shekhar\n   K17BK\n   B57\n  11705756\n");

        Sleep(1000);

        printf("Welcome to the GAME\n");

        printf("Select game mode\n");

        printf("1.Single Player\n");

        printf("2.Multiplayer\n");

        scanf("%d",&l);

        if(l==1){

                singleplayer();

        }

        else if(l==2){

                multiplayer();

        }


}
```

```c
void singleplayer()

{

        sem_wait(&s);

        printf("Your game is loading\n");

        sem_post(&s);

}


void multiplayer()

{

        sem_init(&s,0,1);

        int p,i,k;

        m:

        printf("Enter the number of players:-\n");

        scanf("%d",&p);

        int p1[p],p2,p3,flag=0;

        if(p<3)

        {

                printf("There must be minimum 3 players for game\n");

                goto m;

        }

        int a[p];

        for(i=0;i<p;i++)

        {

                a[i]=i;

        }
```

```c
        for(k=0;k<p;k++)
        {
                p1[k]=a[k];
                flag++;
                if(flag%3==0)
                {
                        singleplayer();
                }
        }
        if(flag%3!=0)
        {
                printf("\nCreating Match\n");
                Sleep(1000);
                printf("Waiting for players to join\n");
        }
}
int main(){
        intro();
        return 0;
}
```