class Program

 {

 struct process

 {

 public string pname;

 public int ppriority;

 public int pburste;

 public int parival;

 public int pwait;

 public string pstate;

 }

 static process Readpro(process proces)

 {

 Console.Write("input name: ");

 proces.pname = Console.ReadLine();

 Console.Write("input arival: ");

 proces.parival = Int32.Parse(Console.ReadLine());

 Console.Write("input priority: ");

 proces.ppriority = Int32.Parse(Console.ReadLine());

 //Console.Write("input burste:");

 //proces.pburste = Int32.Parse(Console.ReadLine());

 Console.Write("input wait: ");

 proces.pwait = Int32.Parse(Console.ReadLine());

 //Console.Write("input state:");

 //proces.pstate = Console.ReadLine();

 return (proces);

 }

 static void writepro(process proces)

 {

 Console.WriteLine("process1 pname:{0} ", proces.pname);

 Console.WriteLine("process1 parival:{0} ", proces.parival);

 Console.WriteLine("process1 waite:{0} ", proces.pwait);

 Console.WriteLine("process1 priority:{0} ", proces.ppriority);

 }

 static void sjf(process[] process1,int np)

 {

 Console.WriteLine("running by short time ");

 for (int i = 0; i < np; i++)

 {

 for (int j = i + 1; j < np; j++)

 if (process1[i].pwait > process1[j].pwait)

 {

 process tt;

 tt = process1[i];

 process1[i] = process1[j];

 process1[j] = tt;

 }

 writepro(process1[i]);

 }

 }

 static void fcfs(process[] process1,int np)

 {

 Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\* ");

 Console.WriteLine("running by first in first out ");

 for (int i = 0; i < np; i++)

 {

 for (int j = i + 1; j < np; j++)

 if (process1[i].parival > process1[j].parival)

 {

 process tt;

 tt = process1[i];

 process1[i] = process1[j];

 process1[j] = tt;

 }

 writepro(process1[i]);

 }

 }

 static void priority\_m(process[] process1,int np)

 {

 Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\* ");

 Console.WriteLine("running by priority ");

 for (int i = 0; i < np; i++)

 {

 for (int j = i + 1; j < np; j++)

 if (process1[i].ppriority > process1[j].ppriority)

 {

 process tt;

 tt = process1[i];

 process1[i] = process1[j];

 process1[j] = tt;

 }

 writepro(process1[i]);

 }

 }

 static void Main(string[] args)

 {

 Console.Write("nmber of process");

 int np = int.Parse(Console.ReadLine());

 Console.Write("1-Read" + "\n"+ "2-Write" + "\n"+

 "3-FCFS" + "\n" + "4-SJF" + "\n" + "5-Priorty" + "\n" + "6-exit" + "\n" + "Choose oprtion");

 int x = int.Parse(Console.ReadLine());

 process[] process1 = new process[np];

 process tt;

 while (x != 6)

 {

 if (x == 1)

 for (int y = 0; y < np; y++)

 process1[y] = Readpro(process1[y]);

 else if (x == 2)

 for (int y = 0; y < np; y++)

 writepro(process1[y]);

 else if (x == 3)

 fcfs(process1, np);

 else if (x == 4)

 sjf(process1, np);

 else if (x == 5)

 priority\_m(process1, np);

 Console.Write("Choose oprtion");

 x = int.Parse(Console.ReadLine());

 }

 Console.Write("The process end");

 Console.ReadKey();

 }

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