VIT-AP UNIVERSITY

School: SCOPE | Semester: WIN SEM 2021-2

Subject: Operating System Lab | Subject Code: CSE2008

Assignment 8

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Question:

1. Implementation of Memory Management Using Paging.

Expected Output should be as follows.

Enter the total main memory size: 100

Enter the frame size in power of 2: 10

no of frame formed=10

Enter the os size : 12

Enter the jop size: 17

do u want to cont(y/n): y

page allocation table ...

jobno	start frameno	end frameno
1	0	1
2	2	3

Code:

```
#include<stdio.h>
#define MAX_PROCESS 10
#define MAX_PAGE 20
int main()
int memory_size, page_size, no_of_pages, no_process, rempages;
 int pro[MAX_PROCESS],frame_no[MAX_PROCESS][MAX_PAGE];
 int i,j,x,y,phy_addr,offset;
 printf("\nEnter the total main memory size: ");
 scanf("%d",&memory_size);
 printf("\nEnter the frame size: ");
 scanf("%d",&page_size);
 no_of_pages = memory_size/page_size;
 printf("\nThe no. of frames formed in memory are: %d ",no_of_pages);
 printf("\nEnter number of processes: ");
 scanf("%d",&no_process);
 rempages = no_of_pages;
 for(i=1;i<=no_process;i++){
```

```
printf("\nEnter no. of pages required for p[%d]: ",i);
scanf("%d",&pro[i]);
if(pro[i] >rempages){
printf("\nMemory is Full");
break;
}
rempages = rempages - pro[i];
printf("\nEnter pagetable for p[%d]:",i);
for(j=0;j<pro[i];j++)
scanf("%d",&frame_no[i][j]);
}
printf("\nEnter Logical Address to find Physical Address ");
printf("\nEnter process no. and pagenumber and offset:");
scanf("%d %d %d",&x,&y, &offset);
if(x>no_process || y>=MAX_PAGE || offset>=page_size)
printf("\nInvalid Process or Page Number or offset");
else{
phy_addr=frame_no[x][y]*page_size+offset;
printf("\nThe Physical Address is: %d",phy_addr);
}
```

```
 printf("\n");
 return 0;
```

output:

```
 Enter the total main memory size:100

 Enter the frame size in power of 2:10

 No of frame formed=10
Enter the os size :12

 Enter the jop size:17

 do u want to cont(y/n):y

 PAGE ALLOCATION TABLE

...

 jobno   start frameno   end frameno
 1              0              1

 2              2              3
```