

Program No.-5

Resource Allocation Graph

Technique Name-SAHIL JAIN

Roll No.-

1900290110082

CSIT-B

PROGRAM---

```
#include
```

```
<stdio.h>
```

```
#include
```

```
<string.h>
```

```
int main()
```

```
{
```

```
    int p, r;
```

```
    printf("Enter the number of processes:
```

```
"); scanf("%d", &p);
```

```
    printf("Enter the number of resources:
```

```
"); scanf("%d", &r);
```

```
    int pra[20][100];
```

```
    int prr[20][100];
```

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

```
    {
```

```
        printf("Enter allocated processes for p%d\n", i
```

```
        + 1); printf("Enter 0 for No and 1 for Yes\n");
```

```
        for (int j = 0; j < r; ++j)
```

```

{
    printf("R%d: ", j + 1);
    scanf("%d",
        &pra[i][j]);
}
printf("Enter requesting resources for p%d\n", i
+ 1); printf("Enter 0 for No and 1 for Yes\n");
for (int j = 0; j < r; ++j)
{
    printf("R%d: ", j + 1);
    scanf("%d",
        &prr[i][j]);
}
}

```

```

printf("\n\t Allocated");
for (int i = 0; i < r; ++i)
    printf("\t");
printf("Requesting\n\t");
for (int i = 0; i < r; ++i)
    printf("R%d\t", i +
1); printf("\t");
for (int i = 0; i < r; ++i)
    printf("R%d\t", i +
1);
printf("\n");

```

```

for (int i = 0; i < p; ++i)
{
    printf("\nP%d\t", i +
    1); for (int j = 0; j < r;
    ++j)
    {
        printf("%d\t", pra[i][j]);
    }
    printf("\t");
    for (int j = 0; j < r; ++j)
    {
        printf("%d\t", prr[i][j]);
    }
}
return 0;
}

```

## OUTPUT—

	Allocated					Requesting			
	R1	R2	R3	R4		R1	R2	R3	R4
P1	1	1	1	0		1	0	1	1
P2	0	1	1	1		1	1	0	1
P3	1	0	1	0		0	1	0	1
P4	1	1	1	0		1	0	1	1

...Program finished with exit code 0  
Press ENTER to exit console.