

Experiment No 1 Problem Statements

1. Given a positive integer, the task is to check whether the number is palindrome or not.

/*Name:-Anuj Rajendra Mane

Roll:-65

Div:-A

Subject:- Data Structures*/

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int no,b,rev=0,cpy;
```

```
    printf("Enter any number\n");
```

```
    scanf("%d",&no);
```

```
    cpy=no;
```

```
    while(no!=0)
```

```
    {
```

```
        b=no%10;
```

```
        rev=rev*10+b;
```

```
        no=no/10;
```

```
    }
```

```
    if(cpy==rev)
```

```
        printf("Palindrome");
```

```
    else
```

```
        printf("Not Palindrome");
```

```
}
```

2.Print the following output.

Output

```
    *
```

```
    * *
```

```
    * * *
```

```
    * * * *
```

```
    * * * * *
```

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```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
for(int i=1;i<=5;i++)
```

```
{
```

```
    for(int j=1;j<=5;j++)
```

```
    {
```

```
        if((i+j)>=6)//change only  
this line in all program
```

```
        printf("* ");
```

```
    else
```

```
        printf(" ");
```

```
    }
```

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

```
}
```

```
}
```

3. Write a program of Linear Search.

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```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int
```

```
roll[10]={ 14,52,63,45,65,84,75,96,51,62};
```

```
    int r,m=0;
```

```
    printf("Roll number is given below\n");
```

```
    for(int i=0;i<=9;i++)
```

```
        printf("%d ",roll[i]);
```

```
    printf("\nEnter your rollno to search\n");
```

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

```
    for(int j=1;j<=9;j++)
```

```
    {
```

```
        if(r==roll[j])
```

```
        {
```

```
            printf("Rollno is found at position=%d",j+1);
```

```
            m=1;
```

```
        }
```

```
    }
```

```
    if(m==0)
```

```
        printf("Not Found");
```

```
}
```

4. Enter Any Number to print Fibonacci Series.

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Div:-A

Subject:- Data Structures*/

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int no,a,b=1,c=0;
```

```
    printf("Enter any number upto you want to print fabonacci series\n");
```

```
    scanf("%d",&no);
```

```
    for(int i=1;i<=no;i++)
```

```
    {
```

```
        printf("%d ",c);
```

```
        a=b;
```

```
        b=c;
```

```
        c=a+b;
```

```
    }
```

```
}
```