Name:	Prerna Sunil Jadhav
Sap Id:	60004220127
Class:	S. Y. B.Tech (Computer Engineering)
Course:	Computer Networks (DJ12CEL405)
Date of Performance:	
Date of Submission:	
Experiment No.:	07
Aim:	Determine class of IP Address

AIM: DETERMINE CLASS OF IP ADDRESS.

CODE:

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

char findClass(char str[])
{
    char arr[5];
    int i = 0;
    while (str[i] != '.')
    {
        arr[i] = str[i];
        i++;
    }
    i--;
    int ip = 0, j = 1;
    while (i >= 0)
    {
        ip = ip + (str[i] - '0') * j;
        j = j * 10;
        i--;
    }

    if (ip >=1 && ip <= 127)
        return 'A';

    else if (ip >= 128 && ip <= 191)
        return 'B';

    else if (ip >= 192 && ip <= 223)
        return 'C';

    else if (ip >= 224 && ip <= 239)
        return 'D';

    else if (ip >= 240 && ip <= 254)
        return 'E';
```

```
    else
        printf("Invalid IP");

    return 'Z';
}

int main()
{
    char str[] = {};
    printf("Enter an IP Address: ");
    scanf("%[^\n]s",str);
    char ipClass = findClass(str);
    printf("IP Address: %s\n", str);
    if (ipClass != 'Z'){
        printf("Given IP address belongs to Class %c\n", ipClass);
    }

    return 0;
}
```

OUTPUT:

```
p20jnl5.32x' '--pid=Microsoft-MIEngine-Pid-4gdunfeq.ecn' '--dbgExe=C:\msys64\mingw64\bin\gdb.ex
--interpreter=mi'
Enter an IP Address: 120.90.11.0
IP Address: A20.90.11.0
Given IP address belongs to Class A
```