

What is your mobile number?

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

int main()
{
    int t, i, j, a = 0;
    scanf("%d", &t);
    char s[t][15];

    for (i = 0; i < t; i++)
    {
        scanf("%s", s[i]);

        if (strlen(s[i]) < 10 || strlen(s[i]) > 10)
        {
            a++;
        }
        else
        {
            for (j = 0; j < 10; j++)
            {
                if (s[i][j] < 48 || s[i][j] > 57 || s[i][0] == 48)
                    a++;
            }
        }

        if (a == 0)
            printf("YES\n");
        else
            printf("NO\n");

        a = 0;
    }

    return 0;
}
```

Alice and Strings

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

int main() {
    char A[1000005], B[1000005];
    int i;

    scanf("%s", A);
    scanf("%s", B);
}
```

```

int n = strlen(A);

// Lengths must match
if (n != strlen(B)) {
    printf("NO");
    return 0;
}

int prev = 26;    // Max possible diff (since 'z' - 'a' = 25)

for (i = 0; i < n; i++) {
    int diff = B[i] - A[i];

    // Rule 1: Cannot decrease characters
    if (diff < 0) {
        printf("NO");
        return 0;
    }

    // Rule 2: Differences must be NON-INCREASING
    if (diff > prev) {
        printf("NO");
        return 0;
    }

    prev = diff;
}

printf("YES");
return 0;
}

```

## Pizza Confusion

```

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

int main() {
    int N;
    char name[25];
    char bestName[25];    // store best restaurant name
    int points;
    int bestPoints = 0; // lowest possible initial value

    scanf("%d", &N);

    for (int i = 0; i < N; i++) {
        scanf("%s %d", name, &points);
    }
}

```

```

    // If this restaurant has more points, update best
    if (points > bestPoints) {
        bestPoints = points;
        strcpy(bestName, name);
    }
    // If points are equal, choose lexicographically smaller name
    else if (points == bestPoints) {
        if (strcmp(name, bestName) < 0) {
            strcpy(bestName, name);
        }
    }
}

printf("%s", bestName);
return 0;
}

```

Password

```

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

int main() {
    int N;
    scanf("%d", &N);

    char words[100][20];    // stores all input words
    char rev[20];           // temporary string for reverse
    int i, j;

    // reading all passwords
    for (i = 0; i < N; i++) {
        scanf("%s", words[i]);
    }

    // compare each word with all others to find reverse pair
    for (i = 0; i < N; i++) {
        int len = strlen(words[i]);

        // create reverse of words[i]
        for (j = 0; j < len; j++) {
            rev[j] = words[i][len - j - 1];
        }
        rev[len] = '\0';

        // check if reverse exists in list
        for (j = 0; j < N; j++) {
            if (strcmp(rev, words[j]) == 0) {

```

```
        // print length and middle character
        printf("%d %c\n", len, words[i][len / 2]);
        return 0;
    }
}

return 0;
}
```