C PROGRAMMING DAY 1

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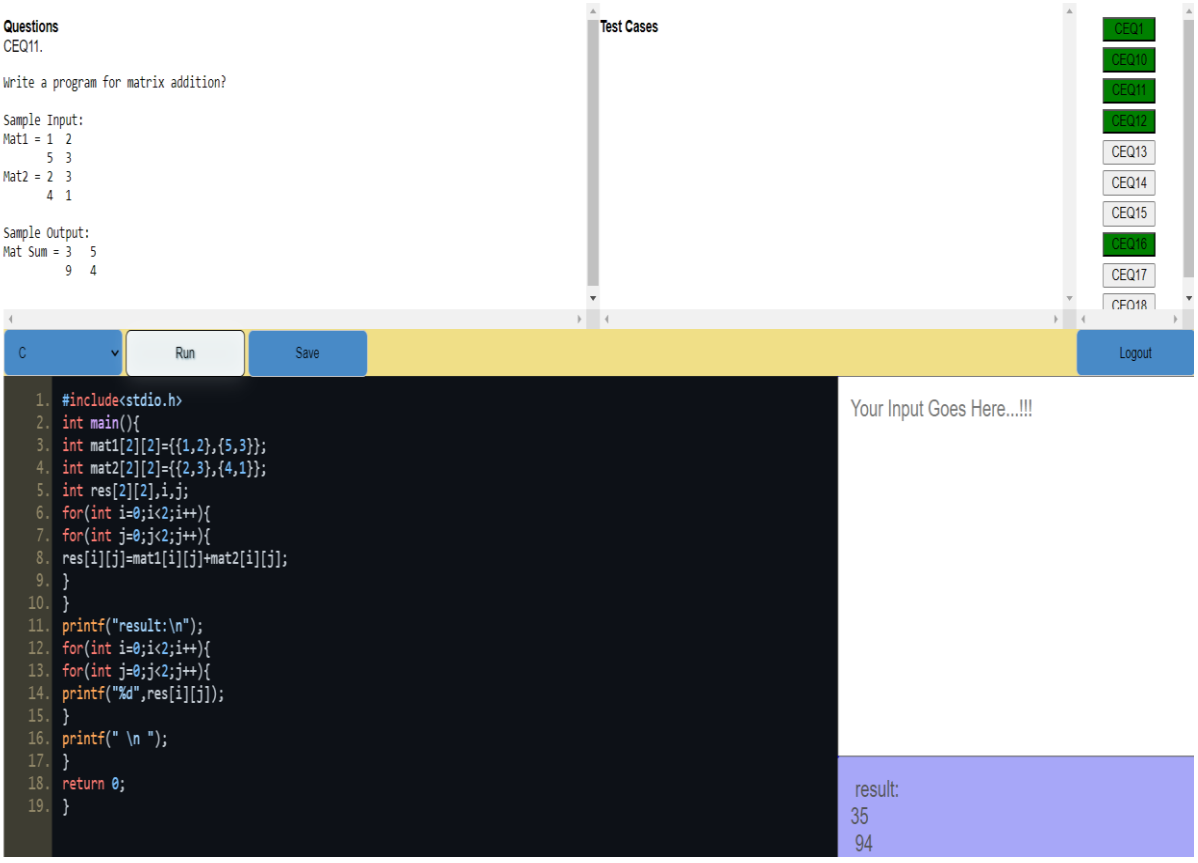
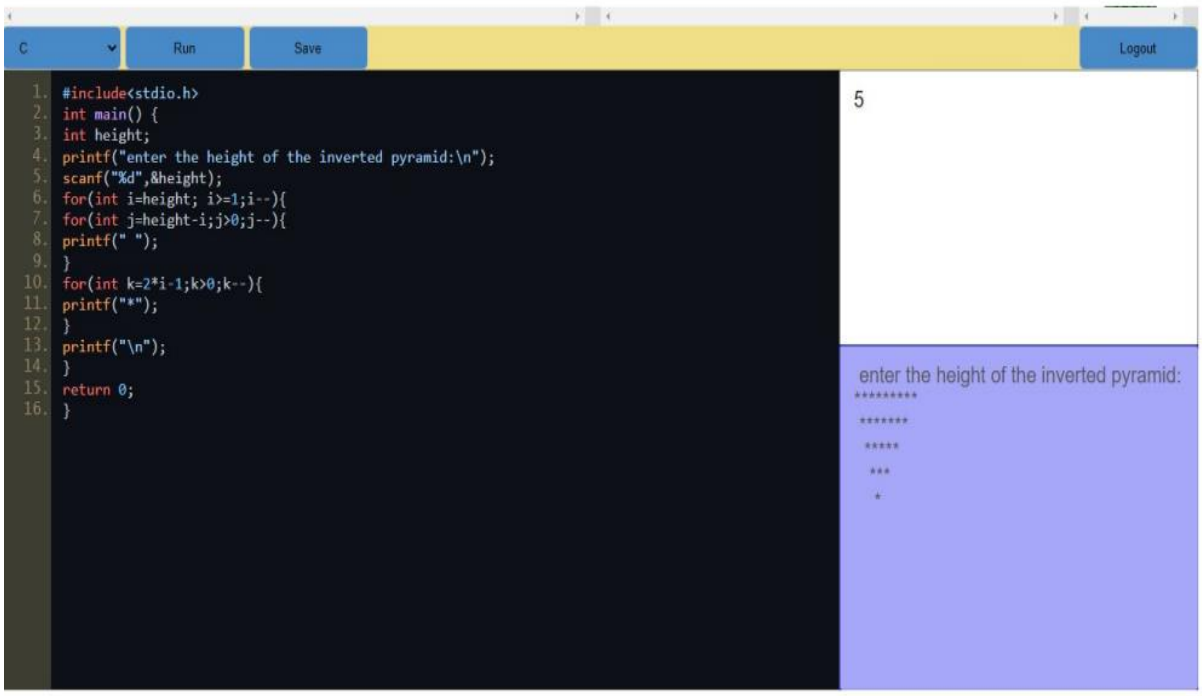
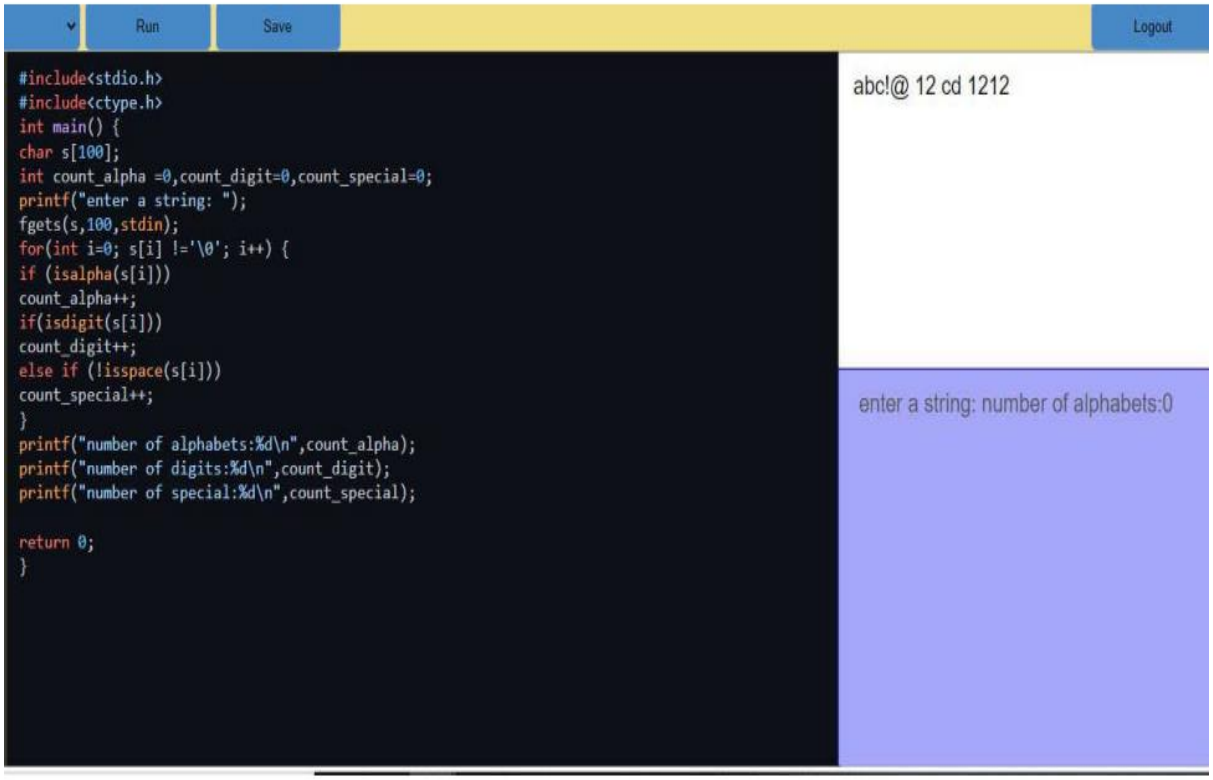
1.



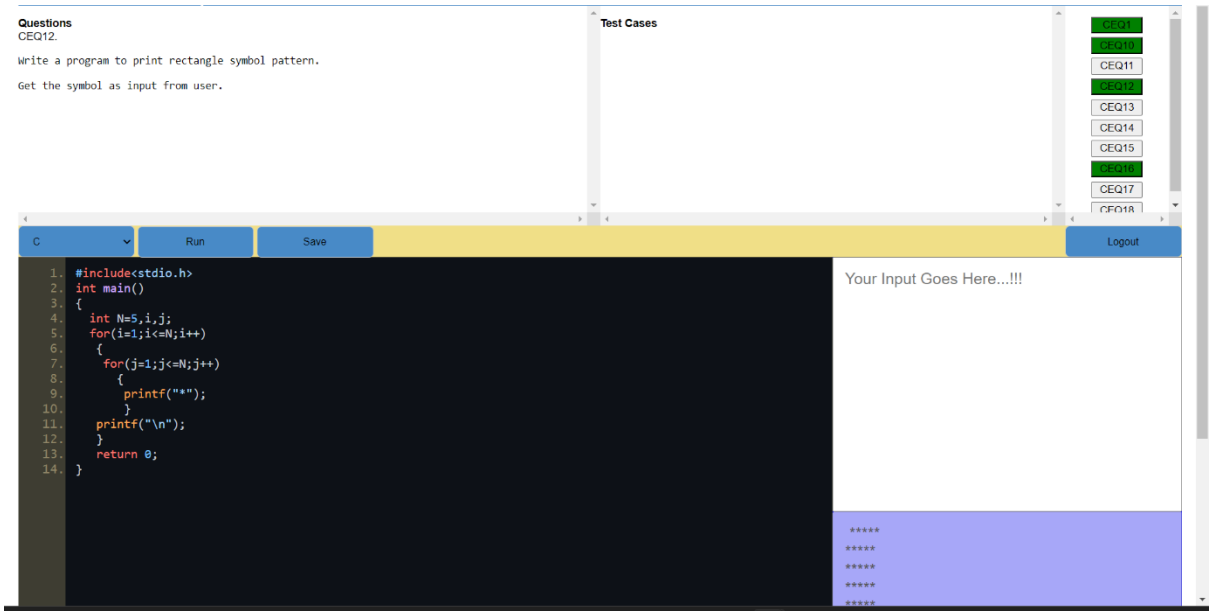
2.


C
Run
Save
Logout
#include<stdio.h>
int main() {
int height;
printf("enter the height of the inverted pyramid:\n");
scanf("%d",&height);
for(int i=height; i>=1;i--){
for(int j=height-i;j>0;j--){
printf(" ");
}
for(int k=2*i-1;k>0;k--){
printf("*");
}
printf("\n");
}
return 0;
}
5
enter the height of the inverted pyramid:
****
****
*****
***
*

3.


Run
Save
Logout
#include<stdio.h>
#include<ctype.h>
int main() {
char s[100];
int count_alpha =0,count_digit=0,count_special=0;
printf("enter a string: ");
fgets(s,100,stdin);
for(int i=0; s[i] !='\0'; i++) {
if (isalpha(s[i]))
count_alpha++;
if(isdigit(s[i]))
count_digit++;
else if (!isspace(s[i]))
count_special++;
}
printf("number of alphabets:%d\n",count_alpha);
printf("number of digits:%d\n",count_digit);
printf("number of special:%d\n",count_special);
return 0;
}
abc!@ 12 cd 1212
enter a string: number of alphabets:0

4.



Questions
CEQ12.

Write a program to print rectangle symbol pattern.

Get the symbol as input from user.

Test Cases

CEQ1
CEQ10
CEQ11
CEQ12
CEQ13
CEQ14
CEQ15
CEQ16
CEQ17
CEQ18

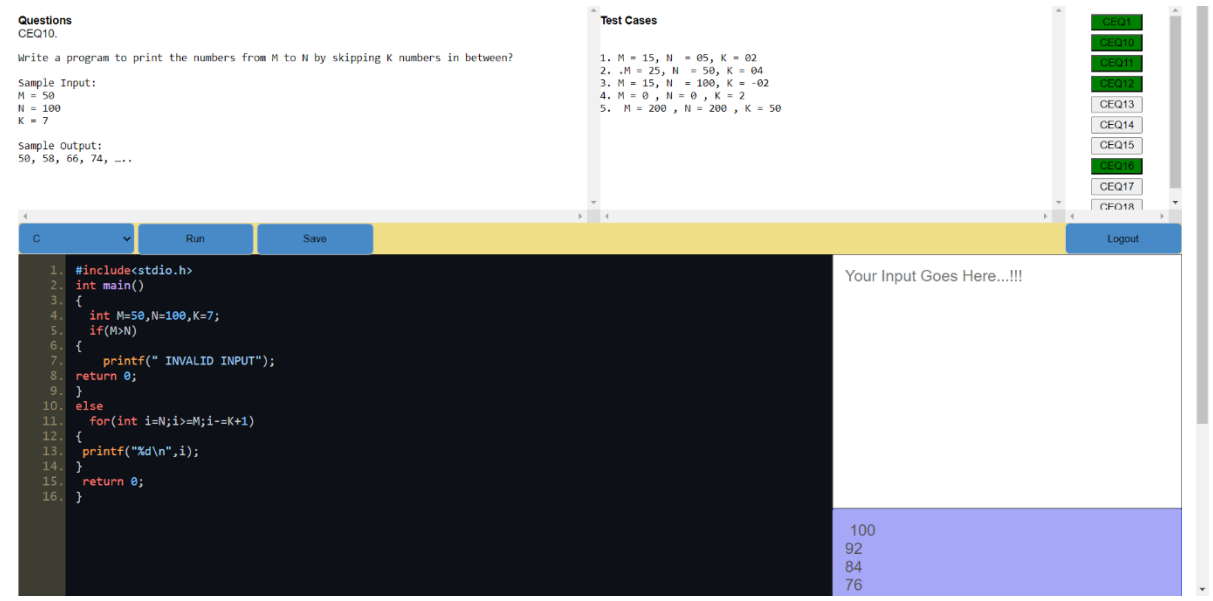
C | Run | Save | Logout

```c
#include<stdio.h>
int main()
{
  int N=5,i,j;
  for(i=1;i<=N;i++)
   {
    for(j=1;j<=N;j++)
      {
       printf("*");
       }
   printf("\n");
   }
   return 0;
}
```

Your Input Goes Here...!!!

```
*****
*****
*****
*****
*****
```

5.



Questions
CEQ10.

Write a program to print the numbers from M to N by skipping K numbers in between?

Sample Input:
M = 50
N = 100
K = 7

Sample Output:
50, 58, 66, 74, …..

Test Cases

1. M = 15, N = 05, K = 02
2. .M = 25, N = 50, K = 04
3. M = 15, N = 100, K = -02
4. M = 0 , N = 0 , K = 2
5. M = 200 , N = 200 , K = 50

CEQ1
CEQ10
CEQ11
CEQ12
CEQ13
CEQ14
CEQ15
CEQ16
CEQ17
CEQ18

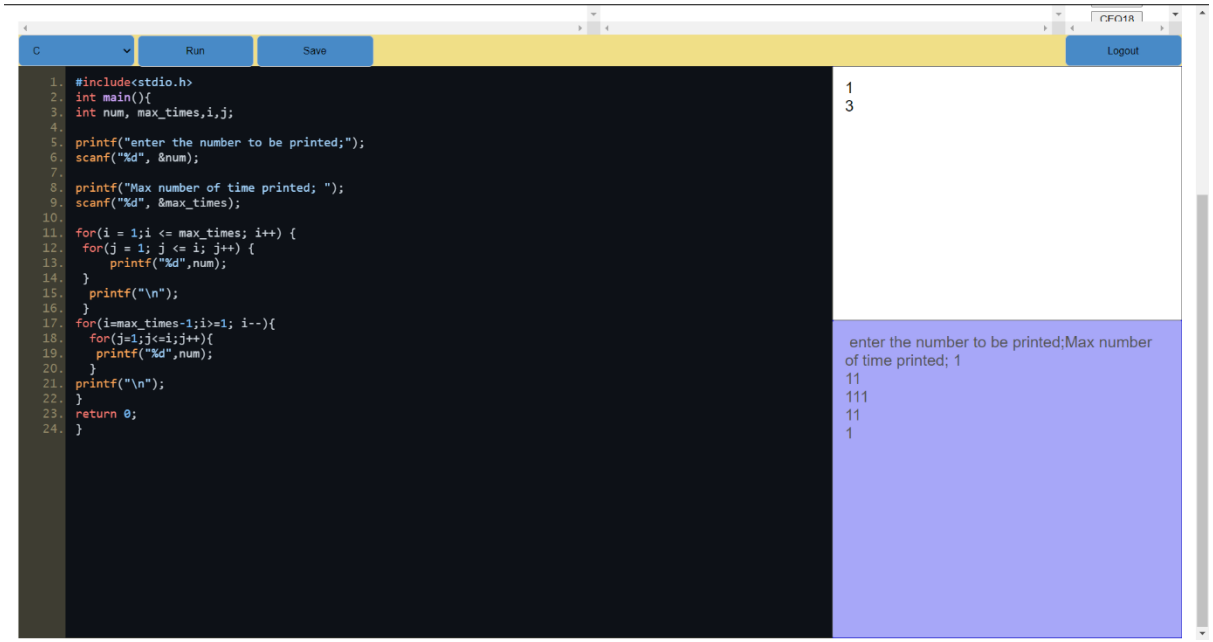
C | Run | Save | Logout

```c
#include<stdio.h>
int main()
{
  int M=50,N=100,K=7;
  if(M>N)
{
    printf(" INVALID INPUT");
return 0;
}
else
  for(int i=N;i>=M;i-=K+1)
{
 printf("%d\n",i);
}
 return 0;
}
```

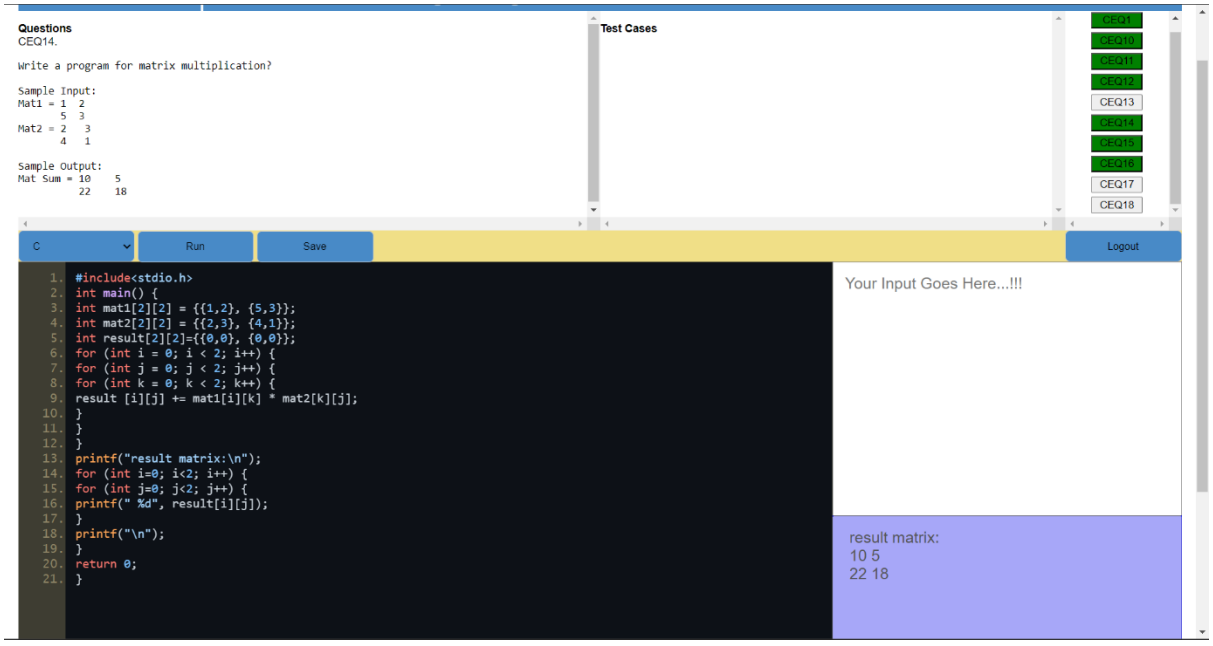
Your Input Goes Here...!!!

```
100
92
84
76
```

6.


C
Run
Save
Logout
#include<stdio.h>
int main(){
int num, max_times,i,j;
printf("enter the number to be printed;");
scanf("%d", &num);
printf("Max number of time printed; ");
scanf("%d", &max_times);
for(i = 1;i <= max_times; i++) {
for(j = 1; j <= i; j++) {
printf("%d",num);
}
printf("\n");
}
for(i=max_times-1;i>=1; i--){
for(j=1;j<=i;j++){
printf("%d",num);
}
printf("\n");
}
return 0;
}
1
3
enter the number to be printed;Max number of time printed; 1
11
111
11
1

7.


Questions
CEQ14.
Write a program for matrix multiplication?
Sample Input:
Mat1 = 1 2
5 3
Mat2 = 2 3
4 1
Sample Output:
Mat Sum = 10 5
22 18
Test Cases
CEQ1
CEQ10
CEQ11
CEQ12
CEQ13
CEQ14
CEQ15
CEQ16
CEQ17
CEQ18
C
Run
Save
Logout
#include<stdio.h>
int main() {
int mat1[2][2] = {{1,2}, {5,3}};
int mat2[2][2] = {{2,3}, {4,1}};
int result[2][2]={{0,0}, {0,0}};
for (int i = 0; i < 2; i++) {
for (int j = 0; j < 2; j++) {
for (int k = 0; k < 2; k++) {
result [i][j] += mat1[i][k] * mat2[k][j];
}
}
}
printf("result matrix:\n");
for (int i=0; i<2; i++) {
for (int j=0; j<2; j++) {
printf(" %d", result[i][j]);
}
printf("\n");
}
return 0;
}
Your Input Goes Here...!!!
result matrix:
10 5
22 18

8.


Questions
CEQ1.
Write a program to reverse a word using loop(Not to use inbuilt functions).
Sample Input:
String: TEMPLE
Sample Output:
Reverse String: ELPMET
Test Cases
1. SIGN UP
2. AT-LEAST
3. 1245
4. !@#$%
5. 145*999=144855
CEQ1
CEQ10
CEQ11
CEQ12
CEQ13
CEQ14
CEQ15
CEQ16
CEQ17
CEQ18
C
Run
Save
Logout
#include<stdio.h>
#include<string.h>
int main(){
char str[40];
printf("\n enter a string to be reversed: ");
scanf("%s",str);
printf (" \n after the reverse of a string: %s ", strrev(str));
return 0;
}
TEMPLE
enter a string to be reversed:
after the reverse of a string: ELPMET