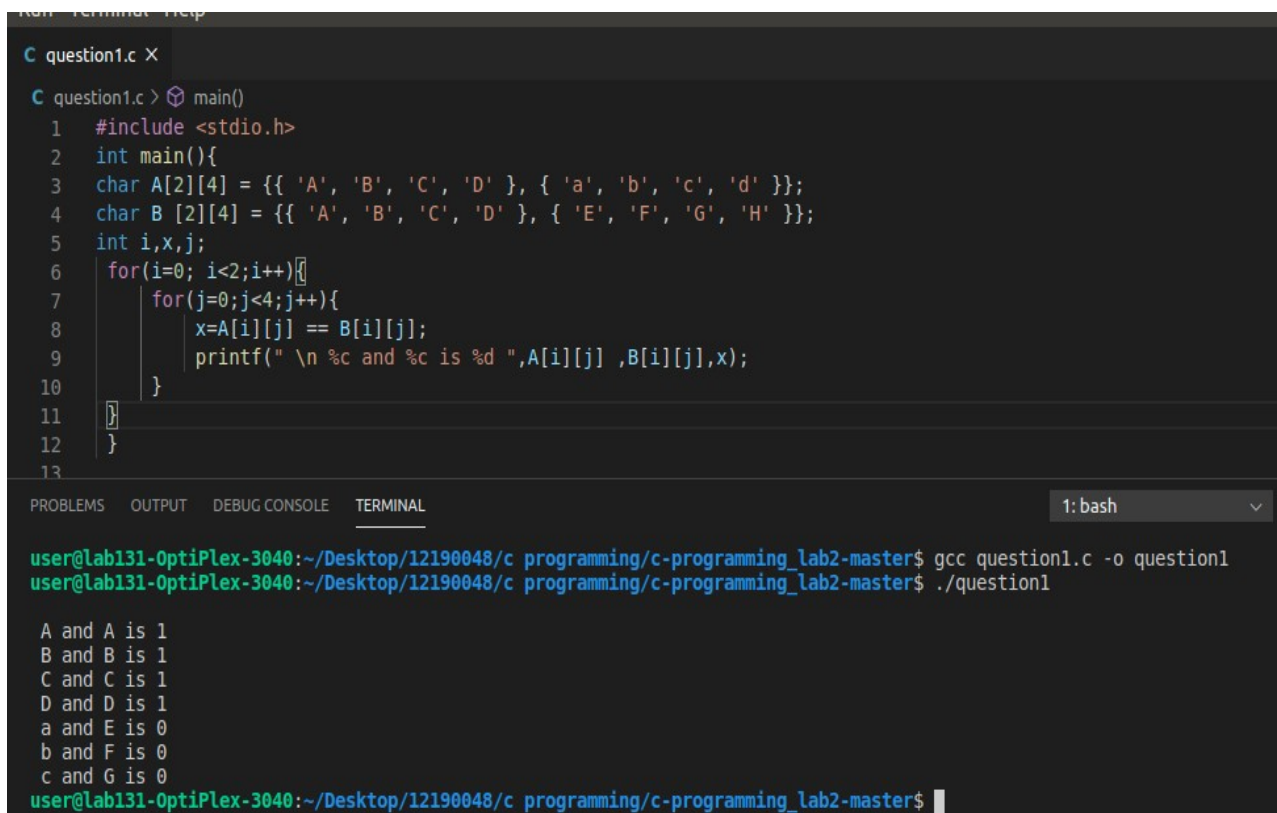


DhendupGhishing@12190048/lab2-C-programming

Answer 1

```
#include <stdio.h>
int main(){
char A[2][4] = {{ 'A', 'B', 'C', 'D' }, { 'a', 'b', 'c', 'd' }};
char B [2][4] = {{ 'A', 'B', 'C', 'D' }, { 'E', 'F', 'G', 'H' }};
int i,x,j;
for(i=0; i<2;i++){
for(j=0;j<4;j++){
x=A[i][j] == B[i][j];
printf(" \n %c and %c is %d ",A[i][j] ,B[i][j],x);
}
}
}
```



The screenshot shows a code editor window titled "question1.c" with the following C code:

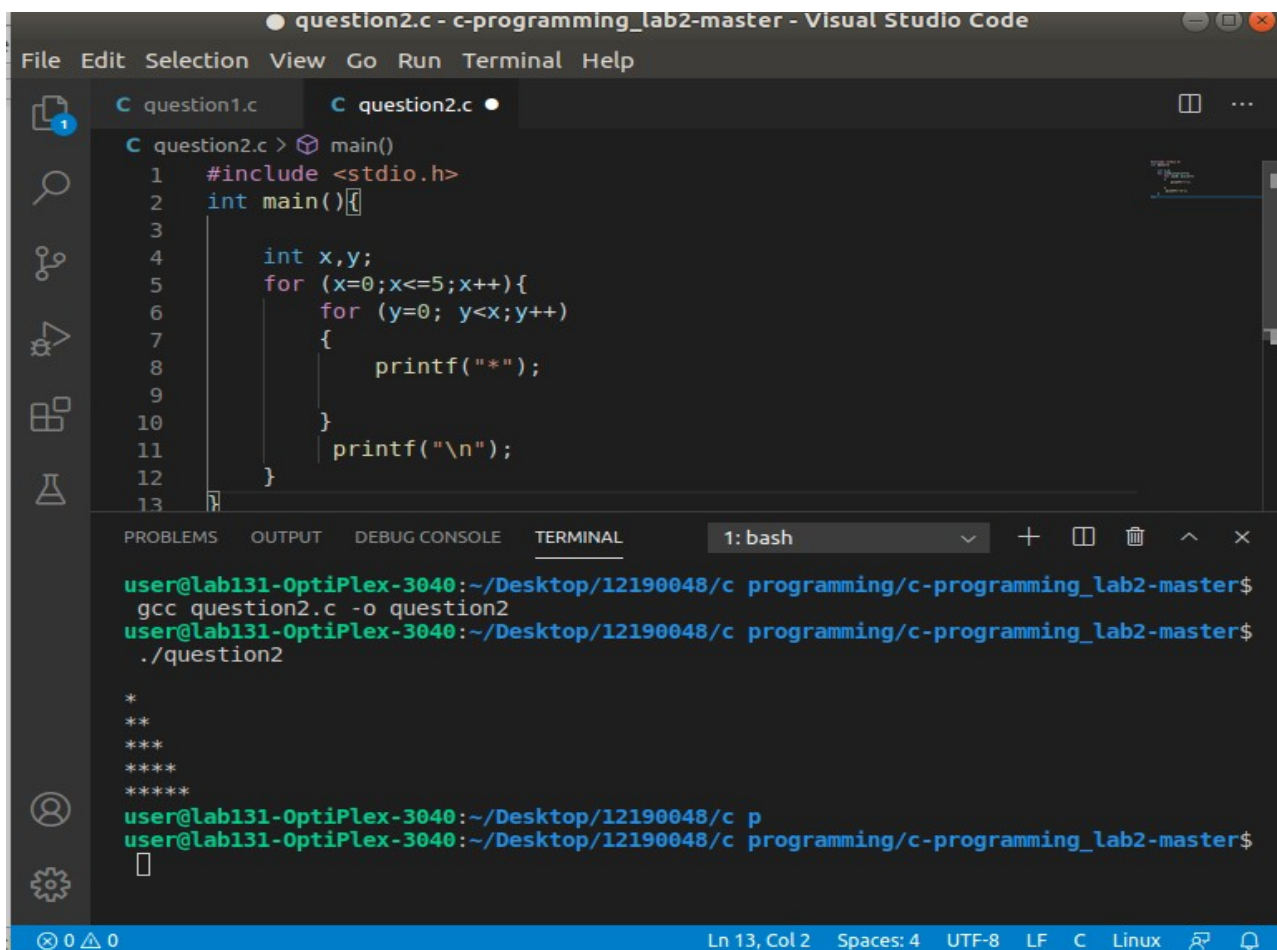
```
1 #include <stdio.h>
2 int main(){
3     char A[2][4] = {{ 'A', 'B', 'C', 'D' }, { 'a', 'b', 'c', 'd' }};
4     char B [2][4] = {{ 'A', 'B', 'C', 'D' }, { 'E', 'F', 'G', 'H' }};
5     int i,x,j;
6     for(i=0; i<2;i++){
7         for(j=0;j<4;j++){
8             x=A[i][j] == B[i][j];
9             printf(" \n %c and %c is %d ",A[i][j] ,B[i][j],x);
10        }
11    }
12 }
13
```

Below the code editor is a terminal window with the following output:

```
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ gcc question1.c -o question1
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ ./question1
A and A is 1
B and B is 1
C and C is 1
D and D is 1
a and E is 0
b and F is 0
c and G is 0
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$
```

Answer 2

```
#include <stdio.h>
int main(){
int x,y;
for (x=0;x<=5;x++){
for (y=0; y<x;y++)
{
printf("*");
}
printf("\n");
}
}
```



The screenshot displays the Visual Studio Code editor with a file named 'question2.c' open. The code in the editor is a C program that prints a pattern of asterisks. The terminal at the bottom shows the compilation and execution of the program.

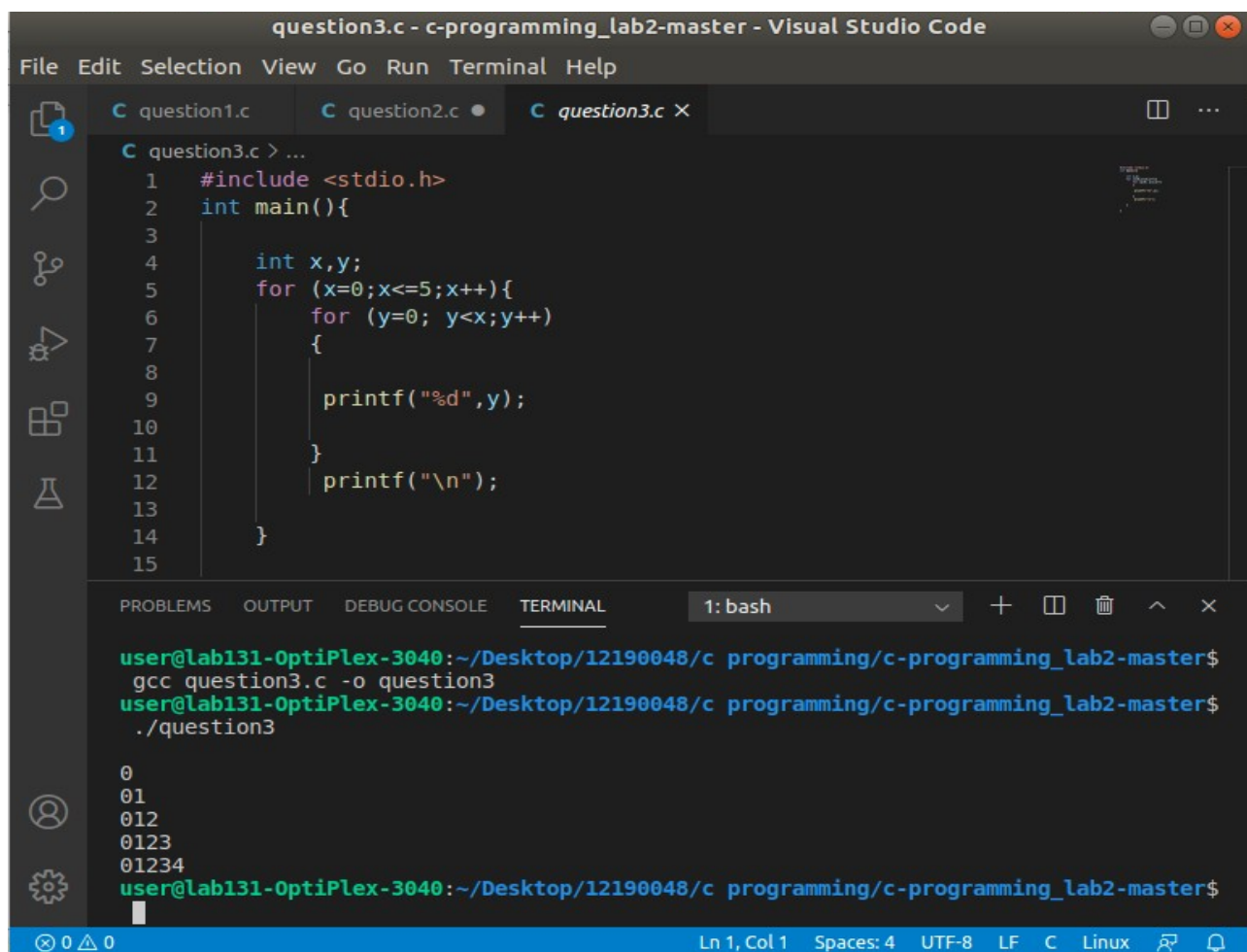
```
question2.c - c-programming_lab2-master - Visual Studio Code
File Edit Selection View Go Run Terminal Help

C question1.c C question2.c
C question2.c > main()
1  #include <stdio.h>
2  int main(){
3
4      int x,y;
5      for (x=0;x<=5;x++){
6          for (y=0; y<x;y++)
7          {
8              printf("*");
9          }
10         printf("\n");
11     }
12 }
13

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: bash
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ gcc question2.c -o question2
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ ./question2
*
**
***
****
*****
user@lab131-OptiPlex-3040:~/Desktop/12190048/c p
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$
```

Answer 3

```
#include <stdio.h>
int main(){
int x,y;
for (x=0;x<=5;x++){
for (y=0; y<x;y++)
{
printf("%d",y);
}
printf("\n");
}
}
```



The screenshot displays the Visual Studio Code editor with a C program named `question3.c` open. The code is as follows:

```
1  #include <stdio.h>
2  int main(){
3
4      int x,y;
5      for (x=0;x<=5;x++){
6          for (y=0; y<x;y++)
7              {
8
9                  printf("%d",y);
10             }
11             printf("\n");
12         }
13     }
14 }
15
```

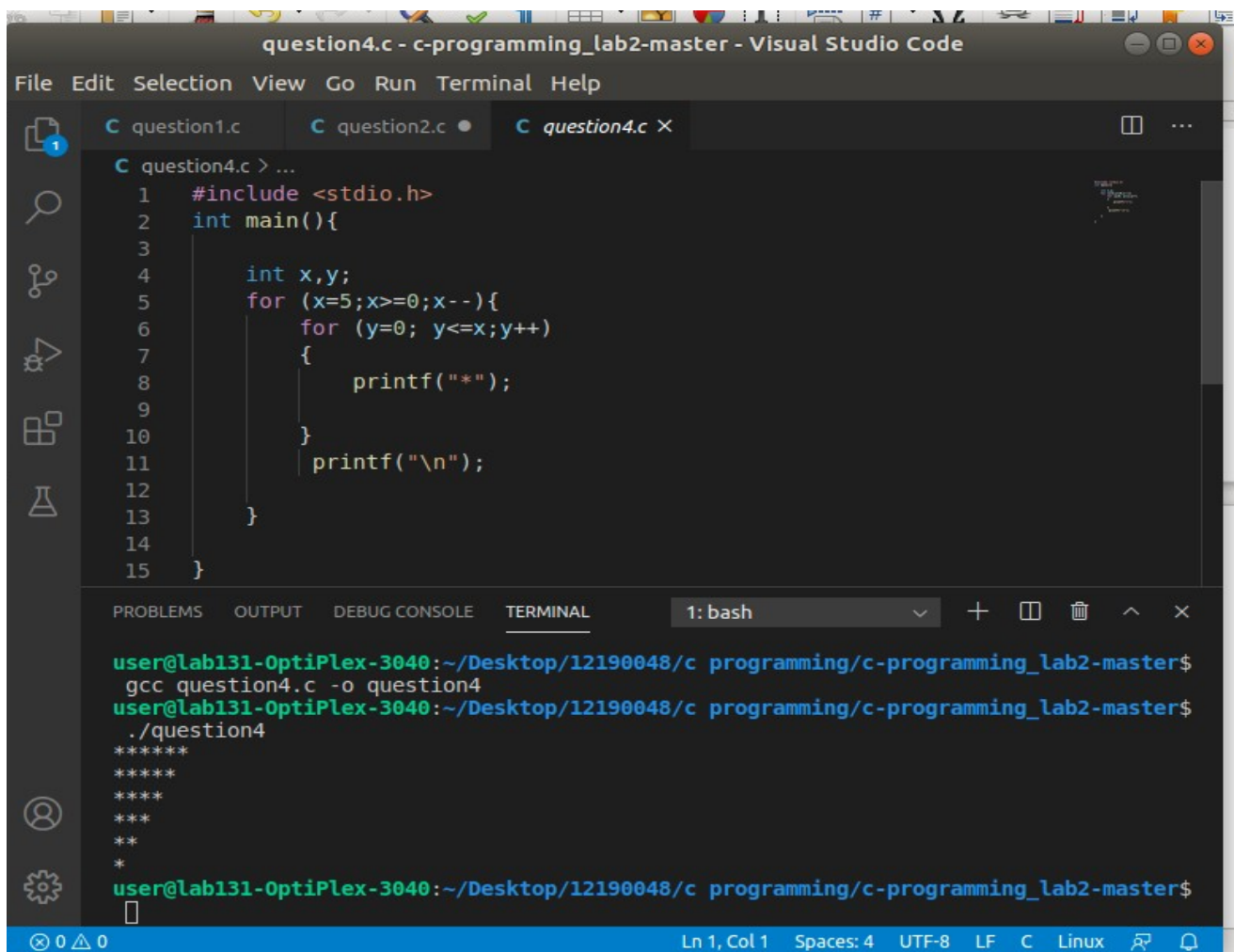
The terminal window at the bottom shows the compilation and execution of the program:

```
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ gcc question3.c -o question3
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ ./question3
0
01
012
0123
01234
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$
```

The status bar at the bottom indicates the file is at line 1, column 1, with 4 spaces, using UTF-8 encoding, LF line endings, and the C language on a Linux system.

Answer 4

```
#include <stdio.h>
int main(){
int x,y;
for (x=5;x>=0;x--){
for (y=0; y<=x;y++)
{
printf("*");
}
printf("\n");
}
}
```



The screenshot displays the Visual Studio Code editor with the file 'question4.c' open. The code is a C program that prints a pattern of asterisks. The terminal window at the bottom shows the compilation and execution of the program.

```
question4.c - c-programming_lab2-master - Visual Studio Code
File Edit Selection View Go Run Terminal Help

C question1.c C question2.c C question4.c X

C question4.c > ...
1  #include <stdio.h>
2  int main(){
3
4      int x,y;
5      for (x=5;x>=0;x--){
6          for (y=0; y<=x;y++)
7          {
8              printf("*");
9          }
10         printf("\n");
11     }
12
13 }
14
15 }

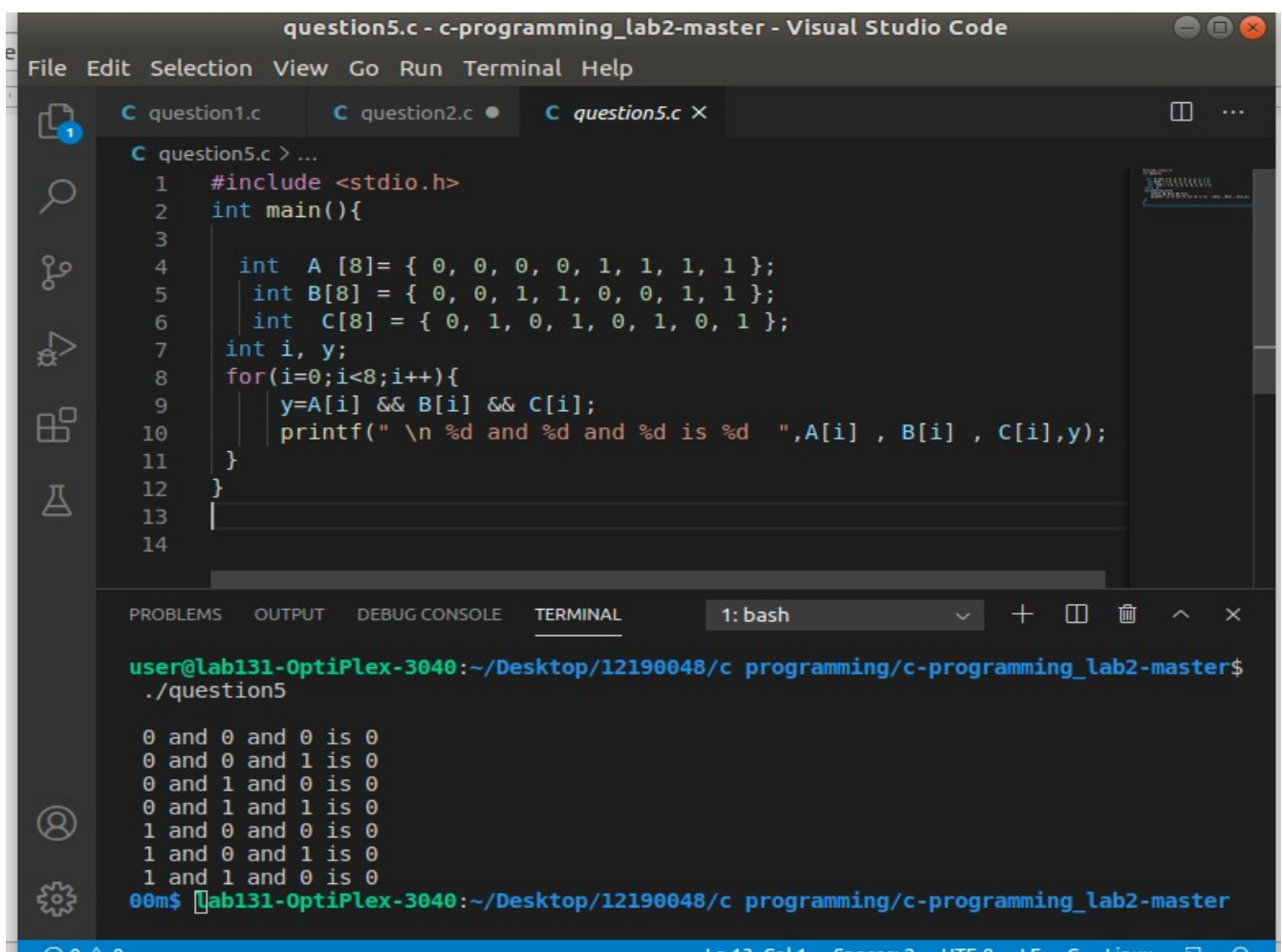
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: bash

user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ gcc question4.c -o question4
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ ./question4
*****
*****
****
***
**
*
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$
```

Answer 5

```
#include <stdio.h>
int main(){

int A [8]= { 0, 0, 0, 0, 1, 1, 1, 1 };
int B[8] = { 0, 0, 1, 1, 0, 0, 1, 1 };
int C[8] = { 0, 1, 0, 1, 0, 1, 0, 1 };
int i, y;
for(i=0;i<8;i++){
y=A[i] && B[i] && C[i];
printf(" \n %d and %d and %d is %d ",A[i] , B[i] , C[i],y);
}
}
```



The screenshot shows the Visual Studio Code editor with a file named 'question5.c' open. The code in the editor matches the provided C program. Below the editor, the 'TERMINAL' panel shows the execution of the program. The command './question5' is run, and the output displays the result of the bitwise AND operation for each index i from 0 to 7.

```
question5.c - c-programming_lab2-master - Visual Studio Code
File Edit Selection View Go Run Terminal Help

C question1.c C question2.c C question5.c X

C question5.c > ...
1  #include <stdio.h>
2  int main(){
3
4      int A [8]= { 0, 0, 0, 0, 1, 1, 1, 1 };
5      int B[8] = { 0, 0, 1, 1, 0, 0, 1, 1 };
6      int C[8] = { 0, 1, 0, 1, 0, 1, 0, 1 };
7      int i, y;
8      for(i=0;i<8;i++){
9          y=A[i] && B[i] && C[i];
10         printf(" \n %d and %d and %d is %d ",A[i] , B[i] , C[i],y);
11     }
12 }
13
14

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: bash
user@lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master$ ./question5

0 and 0 and 0 is 0
0 and 0 and 1 is 0
0 and 1 and 0 is 0
0 and 1 and 1 is 0
1 and 0 and 0 is 0
1 and 0 and 1 is 0
1 and 1 and 0 is 0
1 and 1 and 1 is 1
00m$ [lab131-OptiPlex-3040:~/Desktop/12190048/c programming/c-programming_lab2-master
```