**Goto Labels**

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**1. What is the output of the code given below?**

#include <stdio.h>

int main()

{

printf("%d ", 1);

goto l1;

printf("%d ", 2);

l1:goto l2;

printf("%d ", 3);

l2:printf("%d ", 4);

}

a) 1 4

b) Compilation error

c) 1 2 4

d) 1 3 4

**Answer: a**

**2. What is the output of code given below?**

#include <stdio.h>

int main()

{

printf("%d ", 1);

l1:l2:

printf("%d ", 2);

printf("%d\n", 3);

}

a) Compilation error

b) 1 2 3

c) 1 2

d) 1 3

**Answer) b) 1 2 3**

**3. What is the output of code given below?**

#include <stdio.h>

int main()

{

printf("%d ", 1);

goto l1;

printf("%d ", 2);

}

void foo()

{

l1 : printf("3 ", 3);

}

a) 1 2 3

b) 1 3

c) 1 3 2

d) Compilation error

**Answer)d) Compilation error**

Compiler will tell:

**error: label ‘l1’ used but not defined**

**4. What is output of code given below?**

#include <stdio.h>

int main()

{

int i = 0, j = 0;

while (i < 2)

{

l1 : i++;

while (j < 3)

{

printf("Loop\n");

goto l1;

}

}

}

a) Loop Loop

b) Compilation error

c) Loop Loop Loop Loop

d) Infinite Loop

**Answer: d**

Because, j is never incremented. And, I<2 this condition is executed only once. **(program is constructed in such a manner)**

**5. What is the output of code given below?**

#include <stdio.h>

int main()

{

int i = 0, j = 0;

while (l1: i < 2)

{

i++;

while (j < 3)

{

printf("loop\n");

goto l1;

}

}

}

a) loop loop

b) Compilation error

c) loop loop loop loop

d) Infinite loop

**Answer) b) Compilation error.**

**6. What is the output of the code given below?**

#include <stdio.h>

int main()

{

int i = 0, j = 0;

l1: while (i < 2)

{

i++;

while (j < 3)

{

printf("loop\n");

goto l1;

}

}

}

a) loop loop

b) compilation error

c) loop loop loop loop

d) infinite loop

**Answer) a) loop loop.**

**7. The output of the code below is**

#include <stdio.h>

void main()

{

int i = 0;

if (i == 0)

{

goto label;

}

label: printf("Hello");

}

a) Nothing

b) Error

c) Infinite Hello

d) Hello

**Answer) d**

**8. The output of the code below is**

#include <stdio.h>

void main()

{

int i = 0, k;

if (i == 0)

goto label;

for (k = 0;k < 3; k++)

{

printf("hi\n");

label: k = printf("%03d", i);

}

}

a) 0

b) hi hi hi 0 0 0

c) 0 hi hi hi 0 0 0

d) 0 0 0

**Answer) d) 0 0 0**

Now, i is 0. hence, goto label will execute.   
Now, printf("%03d", i); it will print i with width 3. Now, if I’s width is less than 3, it will append 0 at the left.  
  
Now, I was 0. Hence, 3 0’s will be printed.

**9. The output of the code below is**

#include <stdio.h>

void main()

{

int i = 0, k;

label: printf("%d", i);

if (i == 0)

goto label;

}

a) 0

b) Infinite 0

c) Nothing

d) Error

**Answer) b) infinite 0.  
  
10. What is the output of this C code?**

#include <stdio.h>

void main()

{

int i = 5, k;

if (i == 0)

goto label;

label: printf("%d", i);

printf("Hey");

}

a) 5

b) Hey

c) 5 Hey

d) Nothing

**Answer: c**

**11. goto can be used to jump from main to within a function**

a) true

b) false

c) depends

d) varies

Answer) b) false.

**It will show compilation error like: label is used but not defined.**

1. **What is the output of this c code?** 1. #include <stdio.h>
2. int main()
3. {
4. printf("%d ", 1);
5. goto l1;
6. printf("%d ", 2);
7. }
8. void foo()
9. {
10. l1: printf("3 ", 3);
11. }

a) 1 2 3

b) 1 3

c) 1 3 2

d) Compile time error

**Answer)d) Compile time error.**l1 is used but not defined.