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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » Problem Solving Through Programming In C (course)

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Course outline

How does an
NPTEL
online
course
work? ()

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 5 : Assignment 5

The due date for submitting this assignment has passed.

Due on 2023-08-30, 23:59 IST.

Assignment submitted on 2023-08-24, 22:09 IST

1) The statement that transfers control to the beginning of the loop is called **1 point**

- ☐ a) break
☒ b) continue
☐ c) goto
☐ d) None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

b) continue

2) In C three way transfer of control is possible using **1 point**

- ☐ a) Unary operator
☐ b) Logical operator
☒ c) Ternary operator
☐ d) None

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) Ternary operator

○ Lecture 21:
For Statement
(Contd.) (unit?
unit=52&lesso
n=53)

○ Lecture 22:
Example of If-
Else (unit?
unit=52&lesso
n=54)

○ Lecture 23 :
Example of
Loops (unit?
unit=52&lesso
n=55)

○ Lecture 24 :
Example of
Loops (Contd.)
(unit?
unit=52&lesso
n=56)

○ Lecture 25 :
Example of
Loops
(Contd.), Use
of FOR Loops
(unit?
unit=52&lesso
n=57)

○ **Quiz: Week 5
: Assignment
5
(assessment?
name=236)**

○ Week 5 :
Programming
Assignment 1
(/noc23_cs121
/progassignme
nt?name=237)

○ Week 5 :
Programming
Assignment 2
(/noc23_cs121
/progassignme
nt?name=238)

○ Week 5 :
Programming
Assignment 3
(/noc23_cs121

3) What is the output of the following code?

```
#include <stdio.h>
int main()
{
    int i=0;
    do
    {
        printf("while vs do-while\n");
    }while(i==0);
    printf("Out of loop");
    return 0;
}
```

- ☐ a) 'while vs do-while' once
☐ b) 'Out of loop' infinite times
☐ c) Both 'while vs do-while' and 'Out of loop' once
☒ d) 'while vs do-while' infinite times

Yes, the answer is correct.

Score: 1

Accepted Answers:

d) 'while vs do-while' infinite times

4) What is the output of the following C program?

```
#include <stdio.h>
int main()
{
    int a = 0, i;
    for (i = 0; i < 5; i+=0.5)
    {
        a++;
        continue;
    }
    printf("%d", a);
    return 0;
}
```

- ☐ a) 5
☐ b) 10
☒ c) No output
☐ d) Compilation error

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) No output

1 point

1 point

/progassignment?name=239)

- ☐ Week 5 :
Programming
Assignment 4
(/noc23_cs121
/progassignment?name=240)
- ☐ Feedback
Form of Week
5 (unit?
unit=52&lesson=241)

Week 6 ()

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Solving
Session -
July 2023 ()**

5) What is the output of the following C code?

```
#include <stdio.h>
int main()
{
    int a = 1;
    if (a--)
        printf("True\n");
    if (++a)
        printf("False\n");
    return 0;
}
```

- ☐ a) True
- ☐ b) False
- ☒ c) Both 'True' and 'False'
- ☐ d) Compilation error

Yes, the answer is correct.
Score: 1

Accepted Answers:

c) Both 'True' and 'False'

6) What will be the output?

```
#include <stdio.h>
int main()
{
    int x=1;
    do
    {
        continue;
        printf("%d", x);
        x++;
        break;
    }while(x<=10);
    printf("\nAfter loop x=%d", x);
    printf("\n");
    return 0;
}
```

- ☐ a) After loop x=1
- ☐ b) 1
After loop x=2
- ☐ c) 1 2 3 4 5 6 7 8 9 10
- ☒ d) No output

Yes, the answer is correct.
Score: 1

Accepted Answers:

d) No output

1 point

1 point

7)

1 point

What will be the output?

```
#include <stdio.h>
int main()
{
    float k = 0;
    for (k = 0.5; k < 3; k++)
        printf("I love C\n");
    return 0;
}
```

- ☐ a) Error
- ☒ b) I love C - will be printed 3 times
- ☐ c) I love C - will be printed 6 times
- ☐ d) I love C - will be printed 5 times

Yes, the answer is correct.

Score: 1

Accepted Answers:

b) I love C - will be printed 3 times

8)

1 point

What will be the output?

```
#include <stdio.h>
int main()
{
    int x;
    x = 4 < 8 ? 5 != 1 < 5 == 0 ? 1 : 2 : 3;
    printf("%d", x);
    return 0;
}
```

- ☐ a) 1
- ☒ b) 2
- ☐ c) 3
- ☐ d) Error

No, the answer is incorrect.

Score: 0

Accepted Answers:

c) 3

9)

1 point

The following program is used to find the reverse of a number using C language. Find the missing condition inside while statement (indicated as 'xxxx').

```
#include <stdio.h>
int main()
{
    int n, reversedNumber = 0, remainder;

    printf("Enter an integer: ");
    scanf("%d", &n);

    while(xxxx)
    {
        remainder = n%10;
        reversedNumber = reversedNumber*10 + remainder;
        n /= 10;
    }

    printf("Reversed Number = %d", reversedNumber);

    return 0;
}
```

- ☒ a) n!=0
- ☐ b) n==0
- ☐ c) n%10==0
- ☐ d) n/10==0

Yes, the answer is correct.

Score: 1

Accepted Answers:

a) n!=0

10)

1 point

Compute the printed value of i & j of the C program given below

```
#include <stdio.h>
int main()
{
    int i = 0, j = 15;
    while (i<8, j >9)
    {
        i++;
        j--;
    }
    printf("%d, %d\n", i, j);
    return 0;
}
```

- ☐ a) 8,10
- ☐ b) 8,9
- ☒ c) 6, 9
- ☐ d) 7, 10

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) 6, 9