

Assessment sub
X<https://swayam.gov.in>https://swayam.gov.in/nc_details/NPTEL

msushilkumar27_ec@mepcoeng.ac.in ✓

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



Click to register
for Certification
exam

(https://examform.nptel.ac.in/2023_10/exam_form/dashboard)

If already
registered, click
to check your
payment status

Thank you for taking the Week 8 : Assignment 8.

Week 8 : Assignment 8

Your last recorded submission was on 2023-09-19, 22:44 Due date: 2023-09-20, 23:59 IST.

- 1) A function prototype is used for **1 point**
- ☐ a) Declaring the function logic
 - ☐ b) Calling the function from the main body
 - ☒ c) Telling the compiler, the kind of arguments used in the function
 - ☐ d) Telling the user for proper use of syntax while calling the function
- 2) What is the default return type if it is not specified in function definition? **1 point**
- ☐ a) void
 - ☒ b) integer
 - ☐ c) double
 - ☐ d) float

Course outline

**How does an
NPTEL
online
course
work? ()**

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Assessment submitted.

X

Week 8 (0)

- ☐ Lecture 36:
More on
Functions
(unit?
unit=77&lesso
n=78)
- ☐ Lecture 37:
Function
(Contd.) (unit?
unit=77&lesso
n=79)
- ☐ Lecture 38:
Scanf and
Printf
Functions;
Function
Prototype
(unit?
unit=77&lesso
n=80)
- ☒ Lecture 39 :
Parameter
Passing in
Function
Revision (unit?
unit=77&lesso
n=81)
- ☐ Lecture 40:
Parameter
Passing in
Function
Revision
(Contd.) (unit?
unit=77&lesso
n=82)
- ☒ **Quiz: Week 8
: Assignment
8
(assessment?
name=253)**
- ☒ Week 8 :
Programming
Assignment 1
(/noc23_cs121
/progassignme
nt?name=256)
- ☒ Week 8 :
Programming
Assignment 2
(/noc23_cs121

3)

What will be the output?

1 point

```
#include <stdio.h>
int main()
{
    {
        int a = 70;
    }
    {
        printf("%d", a);
    }
    return 0;
}
```

- ☐ a) 70
- ☐ b) Garbage value
- ☒ c) Compilation error
- ☐ d) None

4)

How many times will 'Hello world' be printed?

1 point

```
#include<stdio.h>
int main()
{
    printf("Hello world\n");
    main();
    return 0;
}
```

- ☐ a) Infinite times
- ☐ b) 32767
- ☐ c) 65535
- ☒ d) Till stack overflows

/progassignment
nt?name=258)
Assessment submitted.
X

- ☒ Week 8 :
Programming
Assignment 3
(/noc23_cs121
/progassignment?
nt?name=258)
- ☒ Week 8 :
Programming
Assignment 4
(/noc23_cs121
/progassignment?
nt?name=259)
- ☐ Feedback
Form of Week
8 (unit?
unit=77&lesso
n=261)

Week 9 ()

**DOWNLOAD
VIDEOS ()**

Books ()

**Text
Transcripts ()**

**Problem
Solving
Session -
July 2023 ()**

5) How many times 'Hi' will be printed in the program given below

1 point

```
#include<stdio.h>
int i;
int fun();

int main()
{
    while(1)
    {
        fun();
        main();
    }
    printf("Hello\n");
    return 0;
}
int fun()
{
    printf("Hi");
}
```

- ☐ a) Only once
- ☒ b) Zero times
- ☐ c) Infinite times
- ☐ d) Compilation error

6) How many times the function factorial will be executed?

```
#include<stdio.h>
int factorial(int);
int main()
{
    int n=5;
    long int f;
    f = factorial(n);
    printf("%d! = %ld\n", n, f);
    return 0;
}
int factorial(int n)
{
    if (n == 0)
        return 1;
    else
        return(n * factorial(n-1));
}
```

Hint

1 point

Assessment submitted.

X

- 7) What will be the output? 1 point
- ```
#include<stdio.h>
void func(int n, int sum)
{
 int k = 0, j = 0;
 if (n == 0) return;
 k = n % 10;
 j = n / 10;
 sum = sum + k;
 func (j, sum);
 printf ("%d", k);
}

int main ()
{
 int a = 2048, sum = 0;
 func (a, sum);
 printf ("%d ", sum);
}
```
- ☐ a) 8 ,4, 0, 2, 14
- ☐ b) 8, 4, 0, 2, 0
- ☐ c) 2, 0, 4, 8, 14
- ☒ d) 2, 0, 4, 8, 0
- 8) What is the output of the following C program? 1 point
- ```
#include <stdio.h>
int fun(int n)
{
    int i, j, sum = 0;
    for(i = 1; i<=n; i++)
        for(j=i; j<=i; j++)
            sum = sum + j;
    return(sum);
}
int main()
{
    printf("%d", fun(10));
    return 0;
}
```
- ☒ a) 55
- ☐ b) 45
- ☐ c) 66
- ☐ d) 10
- 9) 1 point

Assessment submitted.

X

Consider the function

```
int find(int x, int y)
{
    return((x<y) ? 0 : (x-y));
}
```

Let a and b be two non-negative integers. The call `find(a, find(a, b))` can be used to find the

- ☐ a) Maximum of a, b
- ☐ b) Positive difference between a and b
- ☐ c) Sum of a and b
- ☒ d) Minimum of a and b

10) What is the output of the C code given below

```
#include <stdio.h>
float func(float age[ ]);

int main()
{
    float result, age[] = { 23.4, 55, 22.6, 3, 40.5, 18 };
    result = func(age);
    printf("%.2f", result);
    return 0;
}

float func(float age[ ])
{
    int i;
    float result, sum = 0.0;
    for (i = 0; i < 6; ++i) {
        sum += age[i];
    }
    result = (sum / 6);
    return result;
}
```

Hint

1 point

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers

Assessment submitted.

X