X

Week 8 : Assignment 8

The due date for submitting this assignment has passed.

Due on 2023-09-20, 23:59 IST.

Assignment submitted on 2023-09-15, 14:25 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

Yes, the answer is correct.
Score: 1

Accepted Answers:
c) Telling the compiler, the kind of arguments used in 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

Yes, the answer is correct.
Score: 1

Accepted Answers:
b) integer

3) ***1 point***

What will be the output?

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

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

Yes, the answer is correct.
Score: 1

Accepted Answers:
c) Compilation error

4) ***1 point***

How many times will 'Hello world' be printed?

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

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

Yes, the answer is correct.
Score: 1

Accepted Answers:
d) Till stack overflows

5) ***1 point***

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

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

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

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

Yes, the answer is correct.
Score: 1

Accepted Answers:
b) Zero times

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));
}
```

120

Hint

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Numeric) 6

1 point

1 point

7) What will be the output?

```
#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

Yes, the answer is correct.
Score: 1

Accepted Answers:
d) 2, 0, 4, 8, 0

8) **1 point**

What is the output of the following C program?

```
#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

Yes, the answer is correct.
Score: 1

Accepted Answers:
a) 55

9) **1 point**

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

Yes, the answer is correct.
Score: 1

Accepted Answers:
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("%0.2f", 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;
}
```

27.08

Hint

Yes, the answer is correct.
Score: 1

Accepted Answers:
(Type: Numeric) 27.08

1 point