C_90 ⇒ Functions in C - Part 1

Functions with Argument without Return Type

syntax:

void functionname (Datatype 1, 2, ... n);

function declaration

```
Void functionname(Datatype 1 variableName), ... n).
{
  ------
  ------
}
```

function difinition

Example:

```
Void fun(int, int);
void fun( int x, int Y)
{
  -----
}
```

```
main()
{
fun(a,b)
}
```

functionCall (5,7); → values
functionCall (X,Y); → variable

Program 1)

```
Void sum( float, float);
 Void main()
 {
   sum (2.1, 3.1);          // Static values.
 }
void sum( float x, float Y)
{
```

```
float s=0;
 s=x+y;
printf("sum=%f", s);
}
```

Program 2 :-

```
void sum(float, float);
void main()
{
   float a,b;
   printf("Enter the values:\n");
   scanf("%f %f", &a, &b);
   sum(a,b);
}
void sum(float x, float y)
{
   int s=0;
   s=x+y;
   printf("sum=%f", s);
}
```

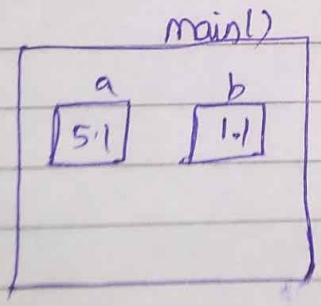
or(a) or(b)

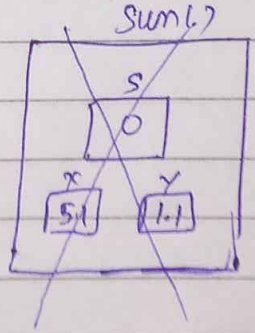
// sum(a,b,c);
↳ Error.

// sum(a);
↳ Error.

Program 3:

```
Void sum(int, float);
Continue - - - - -
- - - - - -
```



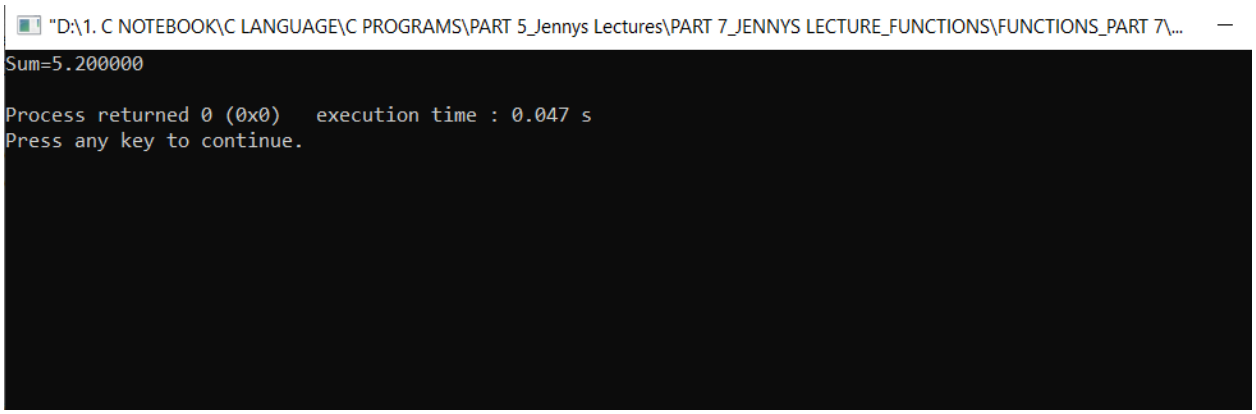


Program 4: [Assignment]

Write a program in which a function takes one argument as input and check that number is even or odd.

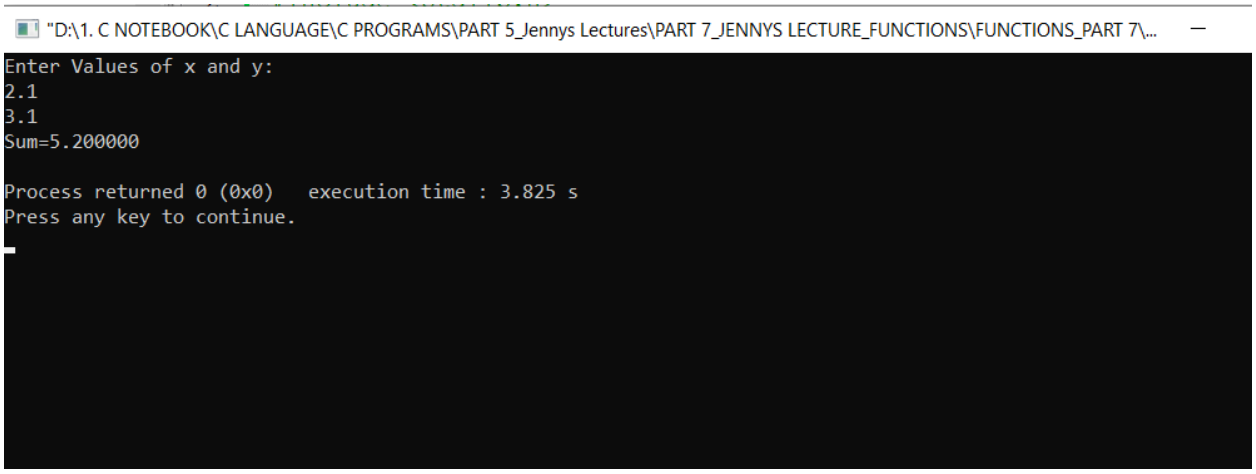
PROBLEM 1:

```c
#include <stdio.h>
#include <stdlib.h>
/** 1 - With Argument No Return Type **/

void sum(float,float);
int main()
{
sum(2.1,3.1); //arguments are static values
}
void sum(float x,float y)
{
 float sum=0;
 sum=x+y;
 printf("Sum=%f\n",sum);
}
```



PROBLEM 2:

```c
#include <stdio.h>
#include <stdlib.h>
/** 2 - With Argument No Return Type **/

void sum(float,float);
int main()
{
   float x,y;
   printf("Enter Values of x and y:\n");
   scanf("%f %f",&x,&y);
   sum(x,y); //arguments as variables holding values
}
void sum(float a,float b)   //same variable name x and y or may be different
{                           //scope of variables is only within the function
 float sum=0;
 sum=a+b;
 printf("Sum=%f\n",sum);
}
```



PROBLEM 3:

```c
#include <stdio.h>
#include <stdlib.h>
/** 3 - With Argument No Return Type **/

void sum(float,float);
int main()
{
  float x,y;
  printf("Enter Values of x and y:\n");
  scanf("%f %f",&x,&y);
  sum(x,y,z);
}
void sum(float a,float b)
{
 float sum=0;
 sum=a+b;
 printf("Sum=%f\n",sum);
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera

File	Line	Message
D:\1. C NO...		In function 'main':
D:\1. C NO...	11	error: 'z' undeclared (first use in this function)
D:\1. C NO...	11	note: each undeclared identifier is reported only once for each fu...
D:\1. C NO...	11	error: too many arguments to function 'sum'

PROBLEM 4:

```c
#include <stdio.h>
#include <stdlib.h>
/** 4 - With Argument No Return Type **/

void sum(float,float);
int main()
{
  float x,y;
  printf("Enter Values of x and y:\n");
  scanf("%f %f",&x,&y);
  sum(x);
}
void sum(float a,float b)
{
 float sum=0;
 sum=a+b;
 printf("Sum=%f\n",sum);
}
```

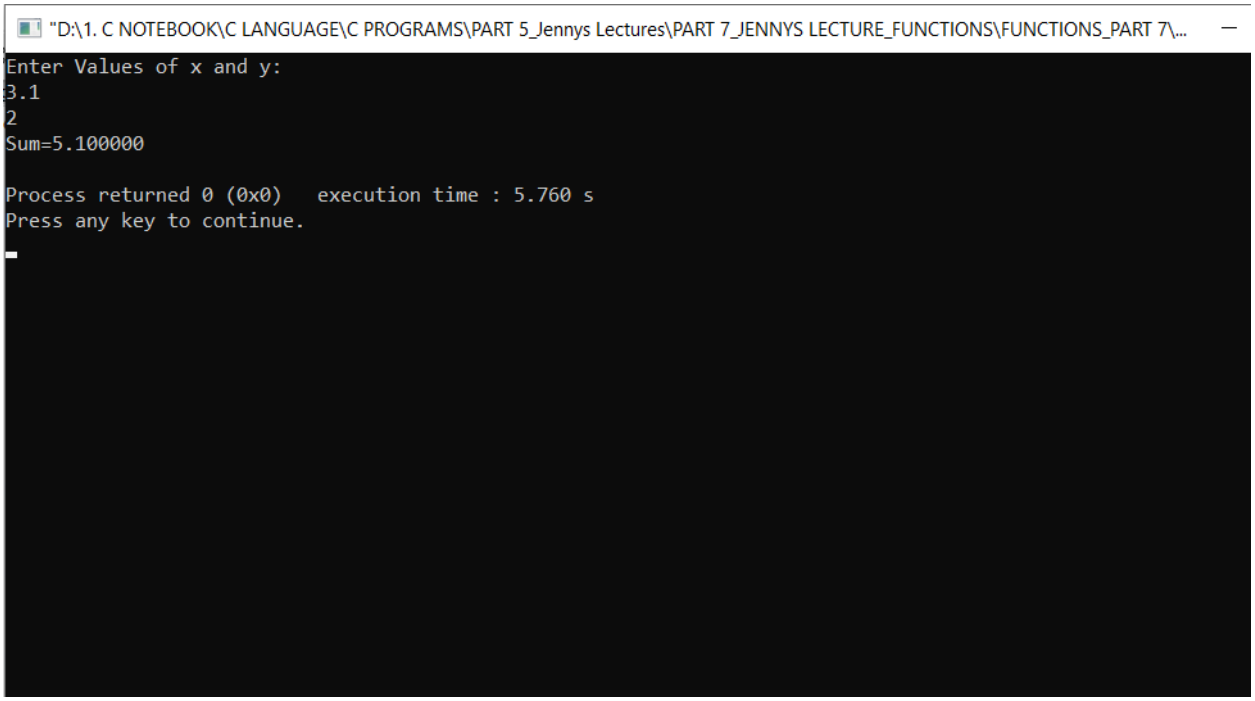
Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/

File	Line	Message
D:\1. C NO...	11	error: too few arguments to function 'sum'

PROBLEM 5:

```c
#include <stdio.h>
#include <stdlib.h>
/** 5 - With Argument No Return Type **/

void sum(float,int);
int main()
{
  float x;
  int y;
  printf("Enter Values of x and y:\n");
  scanf("%f %d",&x,&y);
  sum(x,y);
}
void sum(float a,int b)
{
 float sum=0;
 sum=a+b;
 printf("Sum=%f\n",sum);
}
```



PROBLEM 6:

```c
#include <stdio.h>
#include <stdlib.h>
/** 6 - With Argument No Return Type **/

void sum(int);
int main()
{
  int x;
  printf("Enter Values of x:\n");
  scanf("%d",&x);
  sum(x);
  getch();
}
void sum(int a)
{
 if(a%2==0)
  printf("Entered number %d is Even number\n",a);
 else
  printf("Entered number %d is Odd number\n",a);
}
```