SHEET - FUNCTIONS

1. main()

{

int a;

a=printf("Hello")+printf("Readers!!");

printf("\n%d characters printed",a);

}

Ans:- HelloReaders!!

14 characters printed

2. main()

{

int a=10,b=20,c;

c=add(a,b);

printf("The result after addition is %d",c);

}

int add(int a,int b)

{

return a+b;

}

Ans:-The result after addition is 30(with warning)

3. int main()

{

int add(int,int),a,b;

a=b=10;

printf("The result of addition is %d",add(a,b));

}

int add(int a,int b)

{

return a+b;

}

Ans:-The result of addition is 20

4. int add(int,int);

main()

{

int a=10,b=10,c;

c=add(a,b);

printf("The result after addition is %d",c);

}

int add(inta,int b)

{

returna+b;

}

Ans:-The result after addition is 20

5. main()

{

int add(int,int),a,b,c;

a=10,b=20;

c=add(a,b);

printf("The result of addition is %d",c);

}

int add(int a,b)

{

Return a+b;

}

Ans:-error: unknown type name 'b'

6. main()

{

int add(int,int),a,b,c;

a=10,b=20;

c=add(a,b);

printf("The result of addition is %d",c);

int add(inta,int b)

{

returna+b;

}

}

Ans:- error

main.c: In function ‘main’:

main.c:9:5: error: static declaration of ‘add’ follows non-static declaration

int add(int a,int b)

^~~

main.c:5:5: note: previous declaration of ‘add’ was here

int add(int,int),a,b,c;

^~~

7. void fun(int a)

{

printf("The value of a inside fun is %d\n",a);

}

int main()

{

int a=10,b;

b=fun(a);

printf("The value of b after call to fun is %d",b);

}

Ans:-Error

main.c: In function ‘main’:

main.c:10:2: error: void value not ignored as it ought to be

b=fun(a);

^

8. int add(int a,int b=12)

{

return a+b;

}

int main()

{

int c;

c=add(10);

printf("The result after addition is %d",c);

}

Ans:- Error

main.c:3:20: error: expected ‘;’, ‘,’ or ‘)’ before ‘=’ token

int add(int a,int b=12)

^

main.c: In function ‘main’:

main.c:10:3: warning: implicit declaration of function ‘add’ [-Wimplicit-function-declaration]

c=add(10);

^~~

9. How many times the program will print "G.L.A" ?

#include<stdio.h>

int main()

{

printf("G.L.A");

main();

return 0;

}

Ans:-Till stack overflows

10. What will be the output of the program?

#include<stdio.h>

int fun(int i)

{

i++;

return i;

}

int main()

{

int fun(int);

int i=3;

fun(i=fun(fun(i)));

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

return 0;

}

Ans:-5

11 .Point out the error in the program

#include<stdio.h>

int f(int a)

{

a> 20? return(10): return(20);

}

int main()

{

int f(int);

int b;

b = f(20);

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

return 0;

}

Ans:-Error: return statement cannot be used with conditional operators

12. What is the output of this C code?

#include <stdio.h>

void main()

{

static int x = 3;

x++;

if (x <= 5)

{

printf("hi");

main();

}}

Ans:- hi hi

1. Output of following program?

#include <stdio.h>

int f1() { printf ("Anand "); return 1;}

int f2() { printf ("parkash gupta"); return 1;}

int main()

{

int p = f1() + f2();

return 0;

}

Ans:- Anand parkash gupta

1. What is the output of this C code?

#include <stdio.h>

void m(int k)

{

printf("hi");

}

void m(double k)

{

printf("hello");

}

void main()

{

m(3);

m(3.5);

}

Ans:- Compile time error

main.c:7:6: error: conflicting types for ‘m’

void m(double k)

^

main.c:3:6: note: previous definition of ‘m’ was here

void m(int k)

^

1. #include <stdio.h>

int main()

{

int i = 0;

for (foo(); i == 1; i = 2)

printf("In for loop\n");

printf("After loop\n");

}

int foo()

{

return 1;

}

Ans:- After loop

1. #include <stdio.h>

int main()

{

int \*p = NULL;

for (foo(); p; p = 0)

printf("In for loop\n");

printf("After loop\n");

}

Answer: Compile time error

main.c: In function ‘main’:

main.c:6:6: warning: implicit declaration of function ‘foo’ [-Wimplicit-function-declaration]

for (foo(); p; p = 0)

^~~

/tmp/ccbOGHmb.o: In function `main':

main.c:(.text+0x16): undefined reference to `foo'

collect2: error: ld returned 1 exit status

1. What is the output of this C code?

int main()

{

int m=3;

func1(m,m++,m);

func1(++m,m,m++);

return 0;

}

void func1(int a,int b,int c)

{

printf("%d,%d,%d\n", a,b,c);

}Ans:- 4 3 4

6 6 4

1. What is the output of this C code?

static variable

#include <stdio.h>

void func1(int,int);

void func2(void);

int main()

{

func2();

func2();

func2();

return 0;

}

void func2(void)

{

int a=10;

static int b=10;

printf("%d,%d\n", a,b);

a++;

b++;

}

Ans:- 10 10 10 11 10 12

1. What is the output of this C code?

void func(void);

int main()

{

printf("abc");

goto ab;

}

void func(void)

{

ab:

printf("bye");

}

Ans:- Error

main.c: In function ‘main’:

main.c:7:1: error: label ‘ab’ used but not defined

goto ab;

^~~~

1. What is the output of this C code?

int func();

int main()

{

int x=5;

x= func();

printf("%d", x);

return 0;

}

int func(int a)

{

a=a\*2;

return (a);

}

Ans:- garbage or 0 or 2

1. What is the output of this C code?

main()

{

static int x=5;

if(x>0)

{

printf(“%d”,x);

x--;

main();

}

Ans: 5 4 3 2 1

1. main()

{

int s;

s= func(2,3);

printf(“%d”, s);

}

int func(int a, int b, int c)

{

c=4;

return (a+b+c);

}

Ans:- 9

1. What is the output of this C code?

int main()

{

int s;

s= func(2,3,6);

printf("%d", s);

}int func(int a, int b)

{

return (a+b);

}

Ans:- 5

1. What is the output of this C code?

int main()

{

int s;

s= func(2,3,6);

printf("%d", s);

}int func(int a, int b)

{

int a=6;

return (a+b);

}

Ans:- error

1. What is the output of this C code?

main()

{

int n=5;

printf(“%d”, func(n));

}

func(int n)

{

return (n+sqr(n-2) + cub(n-3));

}

sqr (int x)

{

return(x\*x);

}

cub(int x)

{

return(x\*x\*x);

}

Ans:- 22

1. What is the output of this C code?

main()

{

int a=5;

func1(a);

}

func1(int a)

{

printf(“%d”, a);

if(a>0)

func2(--a);

}

func2(int b)

{

printf(“%d”, b);

if(b>0)

func1(--b);

}

Ans:- 5 4 3 2 1 0

1. What is the output of this C code?

void disp(int,int);

main()

{

int x=15;

float y=290.5;

disp(x,y);

}

void disp(int a, int b)

{

printf(“%d%d”,a,b);

}

Ans:- 15, 290

1. What is the output of this C code?

void func(void);

main()

{

int i=5;

for(i=i+1;i<8;i++)

func();

}

void func(void)

{

int j;

for(j=1; j<3;j++)

printf(“%d”, ++j);

}

Ans:- 2 2

1. What is the output of this C code?

main()

{

int i=10,k;

for(; ; )

{

k=mult(i);

if(--i<5)

break;

}

Printf(“%d”, k);

}

mult(int j)

{

j\*=j;

return(j);

}

Ans:- 25

1. What is the output of this C code?

main()

{

int i=2,j=3;

printf(“%d\n”, func(i,j));

}

func(int a, int b)

{

a=a-5;

b++;

return(!a+ --b);

}

Ans:- 3

1. What is the output of this C code?

main()

{

int x;

x= func(2,3,4);

printf(“%d\n”,x);

}

func(int a, int b, int c)

{

return(a,b,c);

}

Ans:- 4

1. What is the output of this C code?

main()

{

int a=2, b=6;

printf("%d\n", func1(a,b));

printf("%d" ,func2(a,b));

}

func1 (int a, int b)

{

int i, s=0;

for(i=a; i<=b;i++)

{

s=s+ i\*i;

}

return s;

}

func2(int a, int b)

{

int s;

if(a<b)

s=a\*a+func2(a+1,b);

else

s=a\*a;

return s;

}

Ans:- 90 90

1. What is the output of this C code?

void func(int a, int b);

main()

{

int i=5, j=10;

func(i/2, j%3);

}

void func(int a, int b)

{

a=a/2;

b--;

printf(“%d”, a+b);

}

Ans:- 1

1. What is the output of this C code?

int a= 5;

void func(void);

main()

{

func();

printf(“%d\n”, a);

}

void func(void)

{

int a=2;

printf(“%d\t”, a);

}

Ans:- 2 5

1. What is the output of this C code?

main()

{

int i=0,k=3;

i+=func(k);

i+=func(k);

i+= func(k);

printf(“%d\n”,i);

}

func(int k)

{

static int m=2;

m=m+k;

return m;

}

Ans:- 24

1. What is the output of this C code?

main()

{

int n=8;

printf(“%d”, func(n));

}

func(int n)

{

if(n==0)

return 0;

else

return(n+func(n-1));

}

Ans:- 36

1. What will be the output of the program?

#include<stdio.h>

int addmult(int ii, int jj)

{

int kk, ll;

kk = ii + jj;

ll = ii \* jj;

return (kk, ll);

}

int main()

{

int i=3, j=4, k, l;

k = addmult(i, j);

l = addmult(i, j);

printf("%d %d\n", k, l);

return 0;

}

Ans:-12 12

1. What is the output of this C code?

main()

{

int x=55, y=17;

printf(“%d”, func(x,y));

}

func(int x, int y)

{

int q=0;

if(x<y)

return 0;

else

return func(x-y,y)+1;

}

Ans:- 3

1. What is the output of this C code?

main()

{

func1(6);

printf(“\n”);

func2 (6);

}

func1(int x)

{

printf(“%d”,x);

if(x>2)

func1(--x);

}

func2(int x)

{

if(x>2)

func2(--x);

printf(“%d”,x);

}

Ans:- 65432

22345

1. What is the output of this C code?

int x;

int main()

{

x=10;

printf("x=%d\n",x);

printf("x=%d\n",fun1());

printf("x=%d\n",fun2());

printf("x=%d\n",fun3());

}

int fun1()

{ x=x+10;

return(x);

}

int fun2()

{ int x;

x=1;

return(x);

}

int fun3()

{

x=x+10;

return(x);

}

Ans:- 10 20 1 30

1. float check(int);

int main()

{

int i=45;

float c;

c=check(i);

printf("c=%f\n",c);

return 0;

}

float check(int ch)

{

return(ch>=45?3.14:6.28);

}

Ans:- c=3.140000

1. #include<stdio.h>

float areacircle (float);

int main()

{

float area;

float radius = 2.0;

area = areacircle( radius );

printf ("area = %f\n", area);

return 0;

}

float areacircle (float r)

{

float a;

a =3.14\*r\*r;

printf ("a = %f\n", a);

return ( a);

}

Ans:- a = 12.560000

area = 12.560000

1. fun(int a)

{

printf("The value of a inside fun is %d",a);

}

main()

{

int a=10,b;

b=fun(a);

printf("\nThe value of b after call to fun is %d",b);

}

Ans:- The value of a inside fun is 10

The value of b after call to fun is 31

1. fun(int a)

{

printf("The value of a inside fun is %d\n",a);

a+2;

}

main()

{

int a=10,b;

b=fun(a);

printf("The value of b after call to fun is %d",b);

}

Ans:- The value of a inside fun is 10

The value of b after call to fun is 32

1. int add(int,int);

main()

{

inta=10,b=20,c;

c=add(a,b);

printf("The result after addition is %d",c);

}

int add(inta,int b)

{

a+b;

}

Ans:-The result after addition is 10

// if return word is not written, it will take first argument as value

1. int add(int,int);

main()

{

int a=10,b=20,c;

c=add(a,b);

printf("The result after addition is %d",c);

}

int add(inta,int b)

{

a+b;

return;

}

Ans:- The result after addition is 10

1. int add(inta,int b)

{

returna+b;

}

main()

{

int c;

c=add(10);

printf("The result after addition is %d",c);

}

Ans:- Error

1. . int add(inta,int b=12)

{

returna+b;

}

main()

{

int c;

c=add(10,20);

printf("The result after addition is %d",c);

}

Ans:- Error

1. int add(int a=12,int b)

{

returna+b;

}

main()

{

int c;

c=add(10,20);

printf("The result after addition is %d",c);

}

Ans:- Error

1. The below program would give compile error because comma has been used after foo(). Instead, semi-colon should be used i.e. the way it has been used after bar(). That's why if we use semi-colon after foo(), the program would compile and run successfully while printing "GeeksQuiz"

#include "stdio.h"

void foo(void)

{

printf("Anand");

}

void bar(void)

{

printf("Gupta");

}

int main()

{

foo(), bar();

return 0;

}

Ans:- AnandGupta

1. What is the output of this C code?

main()

{

int i=9;

if(i==9)

{

int i=25;

}

printf(“%d”, i);

}

Ans:- 9

1. What is the output of this C code?

main()

{

int a=12,b=17;

printf(“%d”,max(a,b));

}

int max(int x, int y)

{

x>y? return x:return y;

}

Ans:- Error