Sheet-1 Introduction of C (solution)

1. Point out which of the following variable names are invalid.

* Anand\_gupta
* Ruchigupta
* Empdept
* ROLLNO
* Iamagoodboy
* Cse 1st

1. Point out which of the following C constants are invalid.

* 0002
* 134.786
* 20
* 0xfff
* .067
* -11e-13
* 0xgff
* 0x23.67

1. #include <stdio.h>

int main()

{

printf("%05d,%5d,%-5d",32,32,32);

return 0;

}

* 00032, 32,32

1. #include <stdio.h>

int main()

{

printf("%6.3f,%06.3f,%09.3f,%9.3f,%6.0f,%6.0f", 45.6,45.6,45.6,45.6,45.4,45.6);

return 0;

}

* 45.600,45.600,00045.600, 45.600, 45, 46

1. What will be the output of the following programs:

#include <stdio.h>

int main()

{

printf("%d %d %d %d\n",15,015,0x15,0X15);

return 0;

}

* 15 13 21 21

1. #include <stdio.h>

int main()

{

printf("%d %c",'A','A');

return 0;

}

* 65 A

1. #include <stdio.h>

int main()

{

printf("%d %o %x %X\n",15,15,15,15);

return 0;

}

* 15 17 f F

1. #include <stdio.h>

int main()

{

char ch;

int b;

float a;

printf("ch occupied %d size of char %d\n",sizeof(ch),sizeof(char));

printf("b occupied %d size of int %d\n",sizeof(b),sizeof(int));

printf("a occupied %d size of float %d\n",sizeof(a),sizeof(float));

return 0;

}

* ch occupied 1 size of char 1

b occupied 4 size of int 4

a occupied 4 size of float 4

1. #include <stdio.h>

int main()

{

int i = 5, j = 10, k = 15;

printf("%d ", sizeof(k /= i + j));

printf("%d", k);

return 0;

}

* 4 15

1. #include <stdio.h>

int main()

{

//Assume sizeof character is 1 byte and sizeof integer is 4 bytes

printf("%d", sizeof(printf("Anand")));

return 0;

}

* 4

1. #include <stdio.h>

int main()

{

int i = 12;

int j = sizeof(i++);

printf("%d %d", i, j);

return 0;

}

Ans:- 12 4

1. #include <stdio.h>

int main()

{

printf("size of '9'= %d \n", sizeof('9'));

printf("size of 9 = %d \n", sizeof(9));

return 0;

}

* size of '9'= 4

size of 9 = 4

1. #include <stdio.h>

int main()

{

printf("%d %d %d %d %d\n",sizeof(032),sizeof(0x32),sizeof(32),sizeof(32U),sizeof(32L));

printf("%d %d %d",sizeof(32.4),sizeof(32.4f),sizeof(32.4F));

return 0;

}

* 4 4 4 4 8

8 4 4

1. #include <stdio.h>

int main()

{

printf("\nab");

printf("\bsi");

printf("\rha");

}

* hai

1. #include <stdio.h>

int main()

{

printf("%d",sizeof('\n'));

return 0;

}

* 4

1. #include <stdio.h>

int main()

{

char p=307;

short int j=32769;

printf("%d %d %c\n",j,p,p);

return 0;

}

* -32767 51 3

1. #include <stdio.h>

int main()

{

printf("c:\tc\bin");

printf("\nc:\\tc\\bin");

printf("\nhello.world\"");

}

* c: in

c:\tc\bin

hello.world"

1. #include <stdio.h>

int main()

{

printf("hello.world\");

}

* Error

1. #include <stdio.h>

int main()

{

printf("%f %e %g",7.23400,7.23400,7.23400);

}

* 7.234000 7.234000e+00 7.234

1. #include <stdio.h>

int main()

{

printf("%f %d",4,123.123);

}

* 123.123000 4

1. #include <stdio.h>

int main()

{

printf(" \"%%d %%f\"",123,123.2);

}

* "%d %f"

1. #include <stdio.h>

int main()

{

printf("%\*d", 7, 123);

}

* 123

1. #include <stdio.h>

int main()

{

printf("%d", printf("%s", "anand"));

}

* anand5

1. #include <stdio.h>

int main()

{

printf("%d %c\n");

printf("%d %c\n");

return 0;

}

* 1174315864 h

2147483635 �

(always print garbage value)

1. #include <stdio.h>

int main()

{

int x= 23145647888;

float y= 3.4e100;

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

printf("size of x =%d\nsize of y =%d\n",sizeof(x),sizeof(y));

return 0;

}

* x=1670811408

y=inf

size of x =4

size of y =4

1. #include <stdio.h>

int main()

{

int a;

float b;

a=5.999999;

b=5;

printf("a=%d, b=%f",a,b);

return 0;

}

* a=5,b=5.000000

1. #include <stdio.h>

int main()

{

printf("%d, %f\n",4,4);

printf("%d, %f",4.0,4.0);

return 0;

}

* 4, 0.000000

2147483636(garbage), 4.000000

1. #include <stdio.h>

int main()

{

char arr[100];

int b;

printf("%d", scanf("%s %d", arr,&b));

// Suppose that input value given for above scanf is Ruchi 7

return 0;

}

* 2

1. #include <stdio.h>

int main()

{

printf(3 + "anandgupta");

return 0;

}

* ndgupta

1. #include <stdio.h>

int main()

{

int x = printf("Anandgupta");

printf(" %d", x);

return 0;

}

* Anandgupta 10

1. #include "stdio.h"

int main()

{

 int a = 10;

 int b = 15;

 printf("%d",(a+1),(b=a+2));

 printf(" %d",b);

 return 0;

}

* 11 12

1. main()

{

char a=128;

unsigned char b=256;

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

}

Ans:- -128 0