**1. What will be the output if you execute the following code in C?**

#include<stdio.h>

int main(){

int arr[]={6,12,18,24};

int x=0;

x=arr[1]+(arr[1]=2);

printf("%d",x);

return 0;

}

**OUTPUT** : 14

**2. What will be the output if you execute the following code in C?**

#include<stdio.h>

#include<conio.h>

void main(){

int i=3,val;

val=sizeof f(i)+ +f(i=1)+ +f(i-1);

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

}

int f(int num){

return num\*5;

}

**OUTPUT** : 9 1

**3. What will be the output of following c program?**

#include<stdio.h>

#include<conio.h>

float avg(float,float,float);

void main(){

float p=1,q=2,r=-2,a;

a=avg(p,(q=4,r=-12,q),r);

printf("%f",a);

}

float avg(float x,float y,float z){

return (x+y+z)/3;

}

**OUTPUT** : -2.333333

**4. Predict the output or error(s) for the following program:**

void main()

{

int const \* p=5;

printf("%d",++(\*p));

}

**OUTPUT : compiler error.**

**5. Predict the output or error(s) for the following program:**

main()

{

int c[ ]={2.8,3.4,4,6.7,5};

int j,\*p=c,\*q=c;

for(j=0;j<5;j++) {

printf(" %d ",\*c);

++q; }

for(j=0;j<5;j++){

printf(" %d ",\*p);

++p; }

}

**CORRECT PROGRAM :**

main()

{

int c[ ]={2.8,3.4,4,6.7,5};

int j,\*p=c,\*q=c;

for(j=0;j<5;j++)

{

printf(" %d ",\*c);

++q; }

for(j=0;j<5;j++)

{

printf(" %d ",\*p);

++p;

}

}

**OUTPUT :** 2 2 2 2 2 2 3 4 6 5

**6. Predict the output or error(s) for the following program:**

#include<stdio.h>

int main()

{

char string[]="Hello World";

display(string);

}

void display(char \*string)

{

printf("%s",string);

}

CORRECT PROGRAM :

#include<stdio.h>

int main()

{

char string[]="Hello World";

display(string);

}

void display(char \*string)

{

printf("%s",string);

}

**OUTPUT** : Hello World

**7. Print the following hill pattern ,**

Each line contains n characters = space+number

When n=5

1

12

123

1234

12345

**PROGRAM :**

#include <stdio.h>

int main() {

int i, j, rows;

printf("Enter the number of rows: ");

scanf("%d", &rows);

for (i = 1; i <= rows; ++i) {

for (j = 1; j <= i; ++j) {

printf("\* ");

}

printf("\n");

}

return 0;

}

**8. Find the index of first occurrence of X in the array of N elements, if the element not present then print -1**

**PROGRAM :**

#include <stdio.h>

void findFirstAndLast(int arr[], int n, int x)

{

int first = -1, last = -1;

for (int i = 0; i < n; i++) {

if (x != arr[i])

continue;

if (first == -1)

first = i;

last = i;

}

if (first != -1)

printf("First Occurrence = %d \nLast Occurrence = %d", first, last);

else

printf("Not Found");

}

int main()

{

int arr[] = { 1, 2, 2, 2, 2, 3, 4, 7, 8, 8 };

int n = sizeof(arr) / sizeof(int);

int x = 8;

findFirstAndLast(arr, n, x);

return 0;

}

**OUTPUT:** First Occurrence = 8

Last Occurrence = 9

**9. What will be output of following c program?**

#include "string.h"

typedef struct stu1{

char name1[6];

char name2[6];

double marks;

}STU1;

void main(){

STU1 s1={"rohit","kumar",87.43},\*p1;

char \*p;

p1=&s1;

p=memchr(p1,'u',sizeof(STU1));

printf("%s",p);

}

**OUTPUT :** umar

**10. Predict the output or error(s) for the following program:**

#define square(x) x\*x

main()

{

int i;

i = 64/square(4);

printf("%d",i);

}

**CORRECT PROGRAM :**

#define square(x) x\*x

void main()

{

int i;

i = 64/square(4);

printf("%d", i);

}

**OUTPUT** : 64