CSA02- ASSIGNMENT QUESTIONS

DATE :22/03/23

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:

91

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:

1.000000

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

void main()  
{  
int const \* p=5;  
printf("%d",++(\*p));  
}

OUTPUT:

-2.333333

**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; }  
}

OUTPUT:

2 2 2 2 2 2 3 4 6 5

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

**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>

#include <conio.h>

void main()

{

int i,j,rows;

clrscr();

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

scanf("%d",&rows);

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

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

printf("%d",j);

}

}

getch();

}

**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>

int main()

{

int arr[100], N, X;

printf("Enter the size of the array: ");

scanf("%d", &N);

printf("Enter the array elements: ");

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

scanf("%d", &arr[i]);

}

printf("Enter the element to search for: ");

scanf("%d", &X);

int index = -1;

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

if (arr[i] == X) {

index = i;

break;

}

}

if (index == -1) {

printf("Element not found in the array\n");

} else {

printf("Element found at index %d\n", index);

}

return 0;

}

Output

Enter the size of the array: 4

Enter the array elements: 1 2 3 4

Enter the element to search for: 2

Element found at index 1

**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);

}

**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);  
}

OUTPUT:

4