CHPTER NO:6 (FUNCTIONs)

[exercise]

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**Note: Question no 1,2,3 are M.C.Q.S Part.**

**Q No (4):- Write a program with a function that takes two int parameters, adds them together and then returns the sum.**

**Ans No (4):-**

#include<iostream>

using namespace std;

int add(int a,int b) //making add function with two parameter int (a,b);

{

int sum=a+b; //e.g : 2+3;

return sum; // sum = 2 + 3 = 5;

**OUTPUT:**

Enter Two No(with space) : 6 4

6+4=10

}

int main()

{

int n,m;

cout<<"Enter Two No(with space) : ";

cin>>n>>m;

cout<<n<<”+”<<m<<”=”<<add(n,m); // call the add() function;

return 0;

}

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**Q No (5):- Write a program with a function name "mean" to read in three integers from the keyboard to find the arithmetic mean.**

**Ans No(5):-**

#include<iostream>

using namespace std;

int mean(int a,int b,int c) //here a,b,c are formal parameter;

{

int ari=(a+b+c)/3; // e.g : (1+2+3)/3 => 6/3 => 2

**OUTPUT:**

Enter Three Numbers(with spaces) : 3 4 5

Arithmatic Mean=4

return ari;

}

int main()

{

int x,y,z;

cout<<"Enter Three Numbers(with spaces) : ";

cin>>x>>y>>z;

cout<<"Arithmatic Mean(A.M) = "<<mean(x,y,z); //where x,y,z is actual parameter;

return 0;

}

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**Qs.(6):-Write a C++ program having a function name "rectangle" to read in the length and width of a rectangle from the keyboard and find the area of the rectangle. The result should be returned to the main program for displaying on the screen.**

**Ans No(6);-**

#include<iostream>

using namespace std;

int rectangle(int l,int w)

{

int area\_of\_rectangle=l\*w; // area of rectangle = length x width;

return area\_of\_rectangle;

}

int main()

{

int length,width;

**OUTPUT:**

Enter Length of Rectangle :5

Enter width of Rectangle :4

Area of Rectangle =20

cout<<"Enter Length of Rectangle : "<<endl;

cin>>length;

cout<<"Enter width of Rectangle : "<<endl;

cin>>width;

cout<<"Area of Rectangle = "<<rectangle(length,width)<<endl; //e.g : length=2 & width=3, so area will be 2x3=6

return 0;

}

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**Qs.No (7):- Write a C++ program having two function names area and perimeter to find the area and perimeterof a square.**

**Ans No(7):-**

#include<iostream>

using namespace std;

int area\_of\_square(int n); //function prototype;

int perimeter\_of\_square(int m); //function prototype;

int main()

{

int n;

cout<<"Enter Length of the Square : "<<endl;

cin>>n;

cout<<"\nArea of Square = "<<area\_of\_square(n)<<endl; // calling (area\_of\_square) function;

cout<<"Perimeter of Square = "<<perimeter\_of\_square(n)<<endl; // calling (perimeter\_of\_square) function;

return 0;

}

int area\_of\_square(int n) // area of square = Length x Lenth;

{

**OUTPUT:**

Enter Length of the Square : 7

Area of Square=49

Perimeter of Square =28

int area=n\*n;

return area;

}

int perimeter\_of\_square(int m) // perimeter of square = 4 x Length;

{

int perimeter=4\*m;

return perimeter;

}

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**Q.No(8):- Write a C++ program to read a number from the keyboard and then pass it to a function to determine whether it is prime or composite.**

**Ans:-**

#include<iostream>

using namespace std;

void prime()

{

int n;

cout<<"Enter any Number : "<<endl;

cin>>n;

int i;

for(i=2; i<n; i++) {

if(n%i==0) {

cout<<"Composite!!\a\a"<<endl;

break;

}

}

OUTPUT:

Enter any Number:7

Prime

if(i==n) {

cout<<"Prime"<<endl;

}

}

int main()

{

prime();

return 0;

}

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**Qs.(9):- Write a C++ program to get an integer number from keyboard in main program and pass it as an argument to a function where it calculate and display the table.**

OUTPUT:

Enter Number(make table) : 10

Table of 10 is :

10x0=0

10x1=10

10x2=20

10x3=30

10x4=40

10x5=50

10x6=60

10x7=70

10x8=80

10x9=90

10x10=100

**Ans:-**

#include<iostream>

using namespace std;

void table(int); //prototype;

int main() {

int n;

cout<<"Enter Number (make table) : ";

cin>>n;

cout<<"\nTable of "<<n<<”is:” <<endl;

table(n); // where n is actual parameter;

return 0;

}

void table(int x) { // int x is formal parameter;

for(int c=0; c<=10; c++) {

cout<<x<<"x"<<c<<"="<<x\*c<<endl; //e.g : 2 x 0 = 0;

}

}

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**END OF CHPTER NO : 06**