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**Programming Fundamental Lab**

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| **Q. 1** | **Read A, B and C representing the three sides of a triangle. Write a program to find out its area the formula is given below**  **Where S=** |

**Ans:**

#include <iostream>

using namespace std ;

int main() {

int A;

int B;

int c;

int s;

int a;

cout << "Please enter A: \n";

cin>> A;

cout << "Please enter B: \n";

cin>> B;

cout << "Please enter C: \n";

cin>> c;

s=(A+B+c)/2;

a=sqrt(s\*(s-A)\*(s-B)\*(s-c));

cout<< a ;

}

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| **Q. 2** | **Write a C++ program to get marks obtained by a student in percentage *P* and then find the division according to the below rules:**   * **If Percentage P is above or equal to 60 then display…………..1st Division.** * **If Percentage P is between 50 & 59 then display…………………2nd Division.** * **If Percentage P is between 40 & 49 then display….……………3rd Division.** * **If Percentage P is less than 40 then display………………………Fail.** |

**Ans:**

#include <iostream>

using namespace std ;

int main() {

int a;

cout << "enter percentage: ";

cin>> a;

if(a>60)

cout<< "1st division";

else if(a>50)

cout<< "2nd division" ;

else if(a>40)

cout<<"3rd division";

else

cout << "fail";

}

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| **Q. 3** | **Write a C++ program to convert 5 feet to the equivalent number of (a) Inches (b) Yards. Where 1foot =12 Inches and 1 yard=3 feet)** |
| **Ans** | #include<iostream>  using namespace std;  int main(){  int feet=5;  //Accpet Feet from user  cout<<"Enter Feet:";  cin>>feet;  //Convert feet to inches  int inches=feet\*12;  cout<<"Equivalent Inches are "<<inches<<endl;  //convert feet to yard  int yard=feet\*3;  cout<<"Equivalent Yards are "<<yard<<endl;  }  **Q 4 Write a C++ program to find the sum of the following series:**  **2+4+6+8+10**  **Ans:**  #include <iostream>  using namespace std ;  int main() {  cout<< 2+4+6+8+10;  return 0;}  **Q 5 Write a C++ program to input Hours Worked and Hour Rate of an Employee. Calculate and display the Grsoss pay,Tax and Net pay,where**    **Gross-Pay=Hour-Worked\*Hour-Rate**  **Tax=10% of Gross-Pay**  **Net-Pay=Gross-Pay - Tax**  **Ans:**  #include<iostream>  #include<conio.h>  main()  {  int hours, payrate, grosspay;  cout<<"How many hours did you work? ";  cin>>hours);  cout<<"How much do you get paid per hour? ";  cin>>payrate;  grosspay = hours\*payrate;  cout<<"your gross pay is \n", grosspay;  system("pause");  } |