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Task no:1

```cpp
#include <iostream>

using namespace std;

int main() {

double priceA = 80.0 ; // price of product A

double priceB = 45.5 ;// price of product B

double priceC = 20.9 ;// price of product c

int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";

cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;

cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

cout<<"Total cost: $"<<total<<endl;

}
```

Task no:2

```cpp
#include <iostream>

using namespace std;

int main() {

double priceA = 50.0 ; // price of product A

double priceB = 30.0 ;// price of product B

double priceC = 20.0 ;// price of product c

int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";

cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;
```

```cpp
cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double

total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

//Aplying discount using a ternary operator double finaltotal=(total>200)?total*0.9:total;

cout<<"total after discount: $ "<<total <<endl;

}
```

Task no:3

```cpp
#include <iostream>

using namespace std;

int main() {

double priceA = 50.0 ; // price of product A

double priceB = 35.0 ;// price of product B

double priceC = 20.0 ;// price of product c

int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";

cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;

cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double

total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

double finaltotal =(total>200)?total*0.9:total;

cout<<"Total after discount and shiping:$"<<finaltotal<<endl;

}
```

Task no:4

```cpp
#include <iostream>

using namespace std;

int main() {

double priceA = 50.0 ; // price of product A

double priceB = 30.0 ;// price of product B

double priceC = 20.0 ;// price of product c
```

```cpp
int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";

cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;

cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double

total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

double finaltotal =(total>200)?total*0.9:total;

// Add shiping cost if the total cost is less than $150 double shiping=(finaltotal<150)?15.0:0.0;

cout<<"Total after discount and shiping:$"<<finaltotal<<endl;

double totalwithshiping=finaltotal;

int loyaltypoints=(totalwithshiping>300)?50:20;

cout<<"total after discount and shiping:$"<<totalwithshiping<<endl;

cout<<"loyalty points earned:"<<loyaltypoints<<endl;

}
```

Task no:5

```cpp
#include <iostream>

using namespace std;

int main() {

double priceA = 50.0 ; // price of product A

double priceB = 30.0 ;// price of product B

double priceC = 20.0 ;// price of product c

int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";

cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;

cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double

total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

int discount;
```

```cpp
cout<<"Enter the discount applied :$";

cin>>discount;

//Aplying discount using a ternary operator

int ondiscount;

cout<<"enter the amount oj which you want to give discount:$";

cin>>ondiscount;

double finaltotal = (total >ondiscount)?total*discount :total;

cout<<"total after discount:$"<<finaltotal<<endl;

double beforeshiping;

cout <<"enter the amount before which shiping fee is aplicable :$";

cin>>beforeshiping;

double shipingdiscount;

cout<<"enter the amount if it is applicable:$ ";

cin>>shipingdicount;

double shiping = (finaltotal<beforeshiping)?shipingdiscount:0.0;

cout<<"total after discount and shiping :$"<<finaltotal +shiping<<endl;

double totalwithshiping + finaltotal+shiping;

double loyaltycriteria;

double loyaltydicount;

cout<<"enter the loyalty criteria:$";cin>>loyaltycriteria ;

cout<<"enter the loyalty discount:";cin>>loyaltydiscont;

int loyaltypoints = (totalwithshiping>loyaltycriteria)?loyalty discount:0

cout<<"total after discount and shiping:$"<<totalwithshiping<<endl;

cout<<"loyalty point earned :"<<loyaltypoints <<endl;

}
```

Additional Task:

```cpp
#include <iostream>


int main() {

    double priceA = 80.0 ; // price of product A

double priceB = 45.5 ;// price of product B

double priceC = 20.9 ;// price of product c

int quantityA, quantityB, quantityC;

cout<<"Enter the quantity of productA:";
```

```cpp
cin>>quantityA;

cout<<"Enter the quanity of productB:";

cin>>quantityB;

cout<<"Enter the quantity of produtC:";

cin>>quantityC;

double total = (priceA * quantityA)+(priceB * quantityB)+(priceC * quantityC);

cout<<"total amount:$"<<total<<endl;

double shipingcost;

cout<<"enter the shiping cost:$";

cin<<shipcost;

double totalwithshiping=shipingcost+total;

int paymentmethod;

cout<<"select the payment method(1 for caredit card,2 for cash):";

cin>>paymentmethod;

double
transactionfee=(paymentmethod==1)?totalwithshiping*0.02:(paymentmethod==2)?totalwithshiping*0.03:0.0;

double totalafterpayment = totalwithshiping+transactionfee;

cout<<"total payment:$"<<totalafterpayment;

}
```