Q1] Using nested if, write your own program.

Note: This program is to accept a price from user and based on that price, apply the appropriate discount.

#include<stdio.h>

void main()

{

float price=0.0,disc=0.0,total=0.0;

printf("Enter total price: ");

scanf("%f",&price);

if(price>=3000.0)

{

if(price>4000 && price<=5000)

{

disc=0.05;

total=price-(disc\*price);

}

else if(price>5000 && price<=7000)

{

disc=0.1;

total=price-(disc\*price);

}

else if(price>7000 && price<=9000)

{

disc=0.2;

total=price-(disc\*price);

}

else if(price>90000)

{

disc=0.5;

total=price-(disc\*price);

}

}

else

{

total=price;

}

printf("\nFinal price is: %f",total);

}

Output:

Enter total price: 8000

Final price is: 6400.000000

Q2] Write a program for even or odd no.

#include<stdio.h>

void main()

{

int a;

printf("Enter a Number: ");

scanf("%d",&a);

if(a%2==0)

{

printf("Even Number");

}

else

{

printf("Odd Number");

}

}

Output:

Enter a Number: 468

Even Number

Q3] Write a program to accept the mark obtained by a student in computer science andprint the grades accordingly.  
Marks Grade  
Above 90 A  
70 to 90 B  
50 to 69 C  
Below 50 D

#include<stdio.h>

void main()

{

float math=0.0,eng=0.0,sci=0.0,comp=0.0;

printf("Enter marks for Math: ");

scanf("%f",&math);

printf("Enter marks for Science: ");

scanf("%f",&sci);

printf("Enter marks for English: ");

scanf("%f",&eng);

printf("Enter marks for Computers: ");

scanf("%f",&comp);

float avg=(math+sci+eng+comp)/4;

printf("Your Average is: %f",avg);

if(avg>40)

{

if(avg>90)

{

printf("Grade A");

}

else if(avg>70 && avg<=90)

{

printf("Grade B");

}

else if(avg>50 && avg<70)

{

printf("Grade C");

}

else if(avg<50)

{

printf("Grade D");

}

}

else

{

printf("Failed!");

}

}

Output:

Enter marks for Math: 87

Enter marks for Science: 68

Enter marks for English: 91

Enter marks for Computers: 84

Your Average is: 82.500000Grade B

Q4] Implement a menu driven program in C language to do the following tasks1) Read the student data [ use different data types]  
2) Check having license  
3) Check having aadhar card  
4) Check student’s gender  
5) Display a formatted marks card with necessary information

#include<stdio.h>

void main()

{

float cia1=0.0,cia2=0.0,cia3=0.0,avg=0.0;

printf("Enter cia 1 marks: ");

scanf("%f",&cia1);

printf("Enter cia 2 marks: ");

scanf("%f",&cia2);

printf("Enter cia 3 marks: ");

scanf("%f",&cia3);

avg=(cia1+cia2+cia3)/3;

int dl=0,ac=0,g=0;

printf("\nDo you have a driving licence? Enter 1 for YES or 2 for NO: ");

scanf("%d",&dl);

switch(dl)

{

case 1:

printf("\nStudent has a Driving Licence");

break;

case 2:

printf("\nStudent Does NOT have a Driving Licence");

break;

default: printf("\nWrong Entry");

break;

}

printf("\nDo you have an Aadhar Card? Enter 1 for YES or 2 for NO: ");

scanf("%d",&ac);

switch(ac)

{

case 1:

printf("\nStudent has an Aadhar Card");

break;

case 2:

printf("\nStudent Does NOT have an Aadhar Card");

break;

default: printf("\nWrong Entry");

break;

}

printf("\nGender? Enter 1 for Male or 2 for Female:");

scanf("%d",&g);

switch(g)

{

case 1:

printf("\nGender: Male");

break;

case 2:

printf("\nGender Female");

break;

default: printf("\nWrong Entry");

break;

}

printf("\nCIA 1 Marks: %f",cia1);

printf("\nCIA 2 Marks: %f",cia2);

printf("\nCIA 3 Marks: %f",cia3);

printf("\n Average: %f",avg);

}

Output:

Enter cia 1 marks: 89

Enter cia 2 marks: 87

Enter cia 3 marks: 68

Do you have a driving licence? Enter 1 for YES or 2 for NO: 1

Student has a Driving Licence

Do you have an Aadhar Card? Enter 1 for YES or 2 for NO: 2

Student Does NOT have an Aadhar Card

Gender? Enter 1 for Male or 2 for Female:3

Wrong Entry

CIA 1 Marks: 89.000000

CIA 2 Marks: 87.000000

CIA 3 Marks: 68.000000

Average: 81.333336