**Q. Write a menu driven program using a switch case that asks the user to enter a limit. Program should print :**

**1 - ODD numbers**

**2 - EVEN numbers**

**3 - PRIME numbers**

**from 0 to given limit.**

#include<stdio.h>

int main()

{

int choice,limit,n,count,i;

printf("Enter limit : ");

scanf("%d",&limit);

while(1)

{

printf("\nMENU : ");

printf("\n1-To print EVEN numbers from 0 to %d",limit);

printf("\n2-To print ODD numbers from 0 to %d",limit);

printf("\n3-To print PRIME numbers from 0 to %d",limit);

printf("\n4-EXIT");

printf("\nEnter your choice : ");

scanf("%d",&choice);

switch(choice)

{

case 1 :

printf("\nEVEN numbers from 0 to %d : \n",limit);

for(n=0;n<=limit;n++)

{

if(n%2==0)

{

printf("%d\n",n);

n++;

}

}

break;

case 2 :

printf("\nODD numbers from 0 to %d : \n",limit);

for(n=0;n<=limit;n++)

{

if(n%2!=0)

{

printf("%d\n",n);

n++;

}

}

break;

case 3 :

printf("\nPRIME numbers from 0 to %d : \n",limit);

for(n=0;n<=limit;n++)

{

count=0;

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

{

if(n%i==0)

{

count++;

break;

}

}

if(count==0 && n!=1)

{

printf("%d\n",n);

}

}

break;

case 4 :

exit(1);

default :

printf("Error! Choice is not correct");

break;

}

}

return 0;

}

**Output :**

Enter limit : 9

MENU :

1-To print EVEN numbers from 0 to 9

2-To print ODD numbers from 0 to 9

3-To print PRIME numbers from 0 to 9

4-EXIT

Enter your choice : 1

EVEN numbers from 0 to 9 :

0

2

4

6

8

MENU :1-To print EVEN numbers from 0 to 9

2-To print ODD numbers from 0 to 9

3-To print PRIME numbers from 0 to 9

4-EXIT

Enter your choice : 2

ODD numbers from 0 to 9 :

1

3

5

7

9

MENU :

1-To print EVEN numbers from 0 to 9

2-To print ODD numbers from 0 to 9

3-To print PRIME numbers from 0 to 9

4-EXIT

Enter your choice : 3

PRIME numbers from 0 to 9 :

0

2

3

5

7

MENU :

1-To print EVEN numbers from 0 to 9

2-To print ODD numbers from 0 to 9

3-To print PRIME numbers from 0 to 9

4-EXIT

Enter your choice : 4