1. Write a program which takes the month number as an input and display number of days in that month.

Ans #include<stdio.h>

int main()

{

int n;

printf("Enter the month number");

scanf("%d",&n);

switch(n)

{

case 1:

printf("Number of Days 31");

break;

case 2:

printf("Number of Days 28");

break;

case 3:

printf("Number of Days 31");

break;

case 4:

printf("Number of Days 30");

break;

case 5:

printf("Number of Days 31");

break;

case 6:

printf("Number of Days 30");

break;

case 7:

printf("Number of Days 31");

break;

case 8:

printf("Number of Days 31");

break;

case 9:

printf("Number of Days 30");

break;

case 10:

printf("Number of Days 31");

break;

case 11:

printf("Number of Days 30");

break;

case 12:

printf("Number of Days 31");

break;

default:

printf("Invalid Input");

}

return 0;

}

2. Write a menu driven program with the following options:

a. Addition

b. Subtraction

c. Multiplication

d. Division

e. Exit

Ans #include<stdio.h>

int main()

{

int x,a,b;

while(5)

{

printf("\n1. Addition");

printf("\n2. subtraction");

printf("\n3. Multiplication");

printf("\n4. Division");

printf("\n5. Exit");

printf("\nEnter your Choice : ");

scanf("%d",&x);

switch(x)

{

case 1:

printf("Enter two numbers : ");

scanf("%d%d",&a,&b);

printf("Sum is %d",a+b);

break;

case 2:

printf("Enter two numbers : ");

scanf("%d%d",&a,&b);

printf("Difference is %d",a-b);

break;

case 3:

printf("Enter two numbers : ");

scanf("%d%d",&a,&b);

printf("Product is %d",a\*b);

break;

case 4:

printf("Enter two numbers : ");

scanf("%d%d",&a,&b);

printf("Result is %d",a/b);

break;

case 5:

break;

default:

printf("Invalid Choise");

}

if(x==5)

break;

}

printf("\n");

return 0;

}

3. Write a program which takes the day number of a week and displays a unique greeting message for the day.

Ans #include<stdio.h>

int main()

{

int x,a,b;

printf("Enter a Number: ");

scanf("%d",&x);

switch(x)

{

case 1:

printf("Sunday, Hello ");

break;

case 2:

printf("Monday,Hi");

break;

case 3:

printf("Tuesday,Oye ");

break;

case 4:

printf("Wednesday, Nice ");

break;

case 5:

printf("Thursday, Good ");

break;

case 6:

printf("Friday,Love you ");

break;

case 7:

printf("Saturday, like");

break;

default:

printf("Invalid Choise");

break;

}

return 0;

}

4. Write a menu driven program with the following options:

a. Check whether a given set of three numbers are lengths of an isosceles triangle or not

b. Check whether a given set of three numbers are lengths of sides of a right angled triangle or not

c. Check whether a given set of three numbers are equilateral triangle or not

d. Exit

Ans. #include<stdio.h>

int main()

{

int x,a,b,c;

while(5)

{

printf("\n1. Check it isosceles triangle ");

printf("\n2. Check it Right angle Triangle");

printf("\n3. Check it Equilateral Traiangle");

printf("\n5. Exit");

printf("\nEnter your Choice : ");

scanf("%d",&x);

switch(x)

{

case 1:

printf("Enter length of triangle : ");

scanf("%d%d%d",&a,&b,&c);

if(a==b || b==c || c==a)

printf("Isosceles Triangle");

else

printf("Not an Isosceles Triangle");

break;

case 2:

printf("Enter length of triangle : ");

scanf("%d%d%d",&a,&b,&c);

if(a\*a==b\*b+c\*c || b\*b==c\*c+a\*a || c\*c==a\*a+b\*b)

printf("Right angle Triangle");

else

printf("Not a Right angle Triangle");

break;

case 3:

printf("Enter length of triangle : ");

scanf("%d%d%d",&a,&b,&c);

if(a==b && b==c)

printf(" Equilateral Triangle");

else

printf("Not an Equilateral Triangle");

break;

case 5:

break;

default:

printf("Invalid Choise");

}

if(x==5)

break;

}

printf("\n");

return 0;

}

5. Convert the following if-else-if construct into switch case: if(var == 1) System.out.println("good"); else if(var == 2) System.out.println("better"); else if(var == 3) System.out.println("best"); else System.out.println("invalid");

Ans #include<stdio.h>

int main()

{

int x;

printf("Enter your Choice : ");

scanf("%d",&x);

switch(x)

{

case 1:

printf("Good");

break;

case 2:

printf("Better");

break;

case 3:

printf("Best");

break;

default:

printf("Invalid");

}

printf("\n");

return 0;

}

6. Program to check whether a year is a leap year or not. Using switch statement

Ans. #include<stdio.h>

int main()

{

int x;

printf("Enter your Choice : ");

scanf("%d",&x);

switch(x%100==0)

{

case 1:switch(x%400==0)

{

case 1:printf("Leap Year");

break;

case 0:printf("Non Leap Year");

break;

}

break;

case 0:switch(x%4==0)

{

case 1:printf("Leap Year");

break;

case 0:printf("Non Leap Year");

break;

}

break;

}

return 0;

}

7. Program to take the value from the user as input electricity unit charges and calculate total electricity bill according to the given condition . Using the switch statement.

For the first 50 units Rs. 0.50/unit

For the next 100 units Rs. 0.75/unit

For the next 100 units Rs. 1.20/unit

For units above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill.

Ans #include<stdio.h>

int main()

{

float x,amount=0,total=0;

printf("Enter unit : ");

scanf("%f",&x);

switch(x<=50)

{

case 1:amount=x\*0.5;

break;

case 0:switch(x<=150)

{

case 1:amount=(50\*0.5)+(x-50)\*0.75;

break;

case 0:switch(x<=250)

{

case 1:amount=(50\*0.5)+(100\*0.75)+(x-150)\*1.20;

break;

case 0:

amount=(50\*0.5)+(100\*0.75)+(100\*1.20)+(x-250)\*1.50;

break;

}

}

break;

}

total=amount+(amount\*0.2);

printf("Total Bill=%f",total);

return 0;

}

8. Program to convert a positive number into a negative number and negative number into a positive number using a switch statement.

Ans #include<stdio.h>

int main()

{

int x;

printf("Enter Any Number : ");

scanf("%d",&x);

switch(x<0)

{

case 1:printf("%d",x\*-1);

break;

case 0:printf("%d",x\*-1);

}

return 0;

}

9. Program to Convert even number into its upper nearest odd number Switch Statement.

Ans. #include<stdio.h>

int main()

{

int x;

printf("Enter Any Number : ");

scanf("%d",&x);

switch(x%2==0)

{

case 1:printf("%d",x+1);

break;

case 0:printf("%d",x);

}

return 0;

}

10. C program to find all roots of a quadratic equation using switch case

Ans