

Assignment-8

① write a program to check wheather a given number is divisible by 3 and divisible by 2
(Ans) divisible by 3

```
#include <stdio.h>
#include <conio.h>
int main()
{
    int n;
    printf("Enter a number");
    scanf("%d", &n);
    if (n % 3 == 0)
    {
        printf("%d is divisible by 3", n);
    }
    else
    {
        printf("%d is not divisible by 3", n);
    }
    getch();
}
```

divisible by 2

```
#include <stdio.h>
#include <conio.h>
int main()
{
    int n;
    printf("Enter a number");
```

```
scanf("%d", &n);
```

```
if (n % 2 == 0)
```

```
{ printf("%d is divisible by 2", n);
```

```
}
```

```
else
```

```
{ printf("%d is not divisible by 2", n);
```

```
}
```

```
getch();
```

```
}
```

Q) write a program to check whether given no is divisible by 7 or divisible by 3.

```
(Ans) #include <stdio.h>
```

```
#include <conio.h>
```

```
int main()
```

```
{
```

```
int n;
```

```
printf("Enter a number");
```

```
scanf("%d", &n);
```

```
if (n % 7 == 0)
```

```
{ printf("%d is divisible by 7", n);
```

```
}
```

```
if (n % 3 == 0)
```



```

    printf("%d is divisible by 3", n);
}
getch();
}

```

③ write a program to check whether a given number is positive, negative or zero?

(Ans) #include <stdio.h>
#include <conio.h>

```

int main( )
{
    int n;
    printf("Enter a number");
    scanf("%d", &n);
    if (n > 0)
    {
        printf("positive");
    }
    else
    {
        printf("negative");
    }
    if (n == 0)
    {
        printf("zero");
    }
    getch();
}

```

7) write a program to check whether is a leap year or not.

```
// include <stdio.h>
#include <conio.h>

int main()
{
    int n;
    printf("Enter a number of year");
    scanf("%d", &n);
    if (n % 4 == 0)
    {
        printf("%d is divisible by 4 / leap year");
    }
    else
    {
        printf("%d is not divisible by 4 / not", n);
    }
    getch();
}
```

8) write a program which takes the length of sides of triangle as an input. Display whether the triangle is valid or not.

```
// include <stdio.h>
#include <conio.h>

int main()
{
    int a, b, c;
```



```

{
    int side1, side2, side3;
    printf("enter length of three sides of triangle\n");
    scanf("%d %d %d", &side1, &side2, &side3);
    if ((side1 + side2 > side3) && (side2 + side3 > side1) && (side3 + side1 > side2))
    {
        printf("It is valid triangle\n");
    }
    else
    {
        printf("It is an invalid Triangle");
    }
    getch();
}

```

⑧ write a program which takes the month number as an input and display number of days in that month?

(Ans) - #include <stdio.h>
 #include <conio.h>
 int main()
 {
 int month;
 printf("enter month number (1-12)");
 scanf("%d", &month);

```

if (month == 1)
{
    printf("31 days");
}
else if (month == 2)
{
    printf("28 or 29 days");
}
else if (month == 3)
{
    printf("31 days");
}
else if (month == 4)
{
    printf("30 days");
}
else if (month == 5)
{
    printf("31 days");
}
else if (month == 6)
{
    printf("30 days");
}
else if (month == 7)
{
    printf("31 days");
}

```



```

else if (month == 8)
{
    printf("31 days");
}
else if (month == 9)
{
    printf("30 days");
}
else if (month == 10)
{
    printf("31 days");
}
else if (month == 11)
{
    printf("30 days");
}
else
{
    printf("31 days");
}
getch();
}

```

Q) write a program to find the nature of roots of a quadratic equation.

```

Ans) #include <stdio.h>
#include <conio.h>
#include <math.h>
main()

```

```

else if (month == 8)
{
    printf("31 days");
}
else if (month == 9)
{
    printf("30 days");
}
else if (month == 10)
{
    printf("31 days");
}
else if (month == 11)
{
    printf("30 days");
}
else
{
    printf("31 days");
}
getch();
}

```

Q) write a program to find the nature of roots of a quadratic equation.

```

Ans) #include <stdio.h>
#include <conio.h>
#include <math.h>
main()
{

```