

Assignment no-3

① #include <stdio.h>

int main()

{

int x;

printf("Enter a number");

scanf("%d", &x);

if (x > 0)

{

printf("number is positive");

}

else

{ printf("number is non-positive");

}

return 0;

}

② #include <stdio.h>

int main()

{

int x, a;

printf("enter a number");

scanf("%d", &x);

a = x % 5;

if (a == 0)

{

printf("number is divisible by 5");

}

else

{ printf("number is not divisible");

}

return 0;

}

③ #include <stdio.h>

int main()

{

int x, a;

printf("enter a number");

scanf("%d", &x);

a = x % 2;

if (a == 0)

{ printf("number is even");

}

else

{ printf("number is odd");

return 0;

}



```

(4) #include <stdio.h>
int main ()
{
    int x;
    printf("enter a number");
    scanf("%d", &x);
    if (x%2)
    {
        printf("number is odd");
    }
    else
    {
        printf("number is even");
    }
    return 0;
}

```

```

(5) #include <stdio.h>
int main()
{
    int x;
    printf("Enter a number");
    scanf("%d", &x);
    if (x%2)
    {
        printf("number is odd");
    }
    else
    {
        printf("number is even");
    }
    return 0;
}

```

```

(6) (5) #include <stdio.h>
int main()
{
    int x, a;
    printf("enter a number");
    scanf("%d", &x);
    a = (99 < x & x < 1000);
    if (a)
    {
        printf("number is three digit");
    }
    else
    {
        printf("number is not a three digit");
    }
    return 0;
}

```



⑥ #include <stdio.h>

int main()

{

int x, a;

printf("Enter two numbers for checking which one is greater")

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

if (x > a)

{

printf("no is greater %d", x);

else

printf("no is greater %d", a);

}

return 0;

}

⑦

#include <stdio.h>

int main()

{

int x;

printf("Enter year\n");

scanf("%d", &x);

if (x % 4)

{

printf("not a leap year");

}

else

{

printf("leap year");

}

return 0;

}

⑧ #include <stdio.h>

int main()

{

int a, b, c;

printf("enter a value of quadratic equations");

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

if ( $b^2 - 4 \times a \times c > 0$ )

{

if ( $b^2 - 4 \times a \times c > 0$ )

{

printf("real and distinct");

}

else

{

printf("equal root");

}

}

else

{

printf("imaginary root");

}

return 0;

}



```

13) #include <stdio.h>
int main()
{
    int x;
    printf("enter a number");
    scanf("%d", &x);
    if (x%3 == 0 && x%2 == 0)
    {
        printf("number is divisible by 2 and 3");
    }
    else
    {
        printf("not divisible");
    }
    return 0;
}

```

```

14) #include <stdio.h>
int main()
{
    int x;
    printf("enter a number");
    scanf("%d", &x);
    if (x%7 == 0 || x%3 == 0)
    {
        printf("number is divisible");
    }
    else
    {
        printf("not divisible");
    }
    return 0;
}

```

```

15) #include <stdio.h>
int main()
{
    int x;
    printf("enter a number");
    scanf("%d", &x);
    if (x > 0)
    {
        printf("number is positive");
    }
    else if (x < 0)
    {
        printf("number is negative");
    }
    else
    {
        printf("number is equal to 0");
    }
}

```



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```
#include <stdio.h>
int main()
{
    int x;
    printf("enter a random number");
    scanf("%d", &x);
    if (x==1 || x==3 || x==5 || x==7 || x==8 || x==10 || x==12)
    {
        printf("31 days");
    }
    else if (x==4 || x==6 || x==9 || x==11)
    {
        printf("30 days");
    }
    else
    {
        printf("28 or 29 days");
    }
    return 0;
}
```

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```
#include <stdio.h>
int main()
{
    int a, b, c;
    printf("enter a side of triangle");
    scanf("%d %d %d", &a, &b, &c);
    if (a+b > c)
    {
        if (a+c > a)
        if (c+a > b)
            printf("is a triangle");
    }
    else
    {
        printf("not a triangle");
    }
    return 0;
}
```



```

⑨ #include <stdio.h>
int main()
{
    int a, b, c;
    printf("enter a three numbers");
    scanf("%d %d %d", &a, &b, &c);
    if (a > b)
    {
        if (a > c)
            printf("%d is greater", a);
        else if (b > c)
        {
            printf("%d is greater", b);
        }
        else
            printf("%d is greater", c);
    }
}

```

```

⑩ #include <stdio.h>
int main()
{
    char ch;
    printf("enter a alphabet");
    scanf("%c", &ch);
    if (ch >= 'A' && ch <= 'Z')
    {
        printf("upper case");
    }
    else if (ch >= 'a' && ch <= 'z')
    {
        printf("lower case");
    }
}

```

```

⑪ #include <stdio.h>
int main()
{
    char ch;
    printf("Enter a character:");
    scanf("%c", &ch);
    if (ch >= 'a' && ch <= 'z')
        printf("lowercase alphabet");
    else if (ch >= 'A' && ch <= 'Z')
        printf("uppercase alphabet");
    else if (ch >= '0' && ch <= '9')
        printf("digit");
    else
        printf("special character");
    return 0;
}

```