

// 1. WAP to input a number and check whether the number is even or odd by using conditional statement.

```
#include <stdio.h>

int main(){
    int number;
    printf("Enter a number : ");
    scanf("%d", &number);
    if(number%2==0){
        printf("Number is even.");
    }
    else{
        printf("Number is odd.");
    }
    return 0;
}
```

/\*  
Output

Enter a number : 15  
Number is odd.

Enter a number : 20  
Number is even.

\*/

```
// 2. WAP to print total number of days in a month using switch case.
#include <stdio.h>

int main(){
    int nDay;
    printf("1. January\n2. February\n3. March\n4. April\n5. May\n6. June\n7. July\n8. August\n9. September\n10. October\n11. November\n12. December\n\nEnter choice : ");
    scanf("%d", &nDay);

    switch (nDay)
    {
        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;
    }
    return 0;
}
```

/\*  
Output

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December

Enter choice : 2  
Number of days : 28  
\*/

```
/*  
3. WAP to print the following pattern using for loop.
```

```
    1  
   2 2  
  3 3 3  
 4 4 4 4  
5 5 5 5 5  
*/
```

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

```
int main(){  
    int value = 1;  
    for (int i = 0; i < 5; i++)  
    {  
        for (int k = 0; k < 5-value; k++)  
        {  
            printf(" ");  
        }  
  
        for (int j = 0; j < value; j++)  
        {  
            printf("%d ", value);  
        }  
        value++;  
        printf("\n");  
    }  
  
    return 0;  
}
```

```
/*  
    1  
   2 2  
  3 3 3  
 4 4 4 4  
5 5 5 5 5  
*/
```

// 4. WAP to check whether a number is armstrong or not by using while loop.

```
#include <stdio.h>
#include <math.h>

int main(){

    int n1, n2, sumValue=0, noDigits = 0;

    printf("Enter a number : ");
    scanf("%d", &n1);

    n2 = n1;

    while (n2!=0)
    {
        noDigits++;
        n2 = n2/10;
    }

    n2 = n1;

    while (n2!=0)
    {
        sumValue += powf(n2%10, noDigits);
        n2 = n2/10;
    }

    if(sumValue == n1){
        printf("Entered number is armstrong.");
    }
    else{
        printf("Entered number is not armstrong.");
    }

    return 0;
}
```

/\*  
Output

```
Enter a number : 153
Entered number is armstrong.
*/
```

// 5. WAP to all natural number from 1 to n using do while loop where 'n' should be entered by the user.

```
#include <stdio.h>

int main(){
    int n, i=1;
    printf("Enter a number : ");
    scanf("%d", &n);

    do
    {
        printf("%d\n", i);
        i++;
    } while (i<=n);

    return 0;
}
```

/\*  
Output

Enter a number : 10

```
1
2
3
4
5
6
7
8
9
10
```

\*/