Solutions

1. Positive or Negative

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d", &n);
    if (n ⩾ 0) printf("Positive");
    else printf("Negative");
    return 0;
}
```

2. Even or Odd

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d", &n);
    if (n % 2 == 0) printf("Even");
    else printf("Odd");
    return 0;
}
```

Solutions

3. Greater of Two Numbers

```
#include <stdio.h>
int main() {
    int a, b;
    scanf("%d %d", &a, &b);
    if (a > b) printf("%d", a);
    else printf("%d", b);
    return 0;
}
```

4. Divisible by 5

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d", &n);
    if (n % 5 == 0) printf("Divisible by 5");
    else printf("Not divisible");
    return 0;
}
```

Solutions

5. Print 1 to 10

```
#include <stdio.h>
int main() {
    for (int i = 1; i ⩽ 10; i++)
        printf("%d ", i);
    return 0;
}
```

6. Largest of Three

```
#include <stdio.h>
int main() {
    int a,b,c;
    scanf("%d %d %d",&a,&b,&c);
    if (a>b && a>c) printf("%d",a);
    else if (b>c) printf("%d",b);
    else printf("%d",c);
    return 0;
}
```

Solutions

7. Pass or Fail

```
#include <stdio.h>
int main() {
    int m;
    scanf("%d",&m);
    if (m ⩾ 40) printf("Pass");
    else printf("Fail");
    return 0;
}
```

8. Grade System

```
#include <stdio.h>
int main() {
    int m;
    scanf("%d",&m);
    if (m⩾80) printf("A");
    else if (m⩾60) printf("B");
    else if (m⩾40) printf("C");
    else printf("Fail");
    return 0;
}
```

Solutions

9. Print 1 to 10

```
#include <stdio.h>
int main() {
    int y;
    scanf("%d",&y);
    if (y%400==0 || (y%4==0 && y%100≠0))
        printf("Leap Year");
    else printf("Not Leap Year");
    return 0;
}
```

10. Vowel or Consonant

```
#include <stdio.h>
int main() {
    char c;
    scanf(" %c",&c);
    if (c=='a'||c=='e'||c=='i'||c=='o'||c=='u'||
        c=='A'||c=='E'||c=='I'||c=='O'||c=='U')
        printf("Vowel");
    else printf("Consonant");
    return 0;
}
```

Solutions

11. Simple Calculator

```
#include <stdio.h>
int main() {
    int a,b;
    char op;
    scanf("%d %c %d",&a,&op,&b);
    switch(op) {
        case '+': printf("%d",a+b); break;
        case '-': printf("%d",a-b); break;
        case '*': printf("%d",a*b); break;
        case '/': printf("%d",a/b); break;
        default: printf("Invalid");
    }
    return 0;
}
```

Solutions

12. Day Name

```
#include <stdio.h>
int main() {
    int d;
    scanf("%d",&d);
    switch(d) {
        case 1: printf("Sunday"); break;
        case 2: printf("Monday"); break;
        case 3: printf("Tuesday"); break;
        case 4: printf("Wednesday"); break;
        case 5: printf("Thursday"); break;
        case 6: printf("Friday"); break;
        case 7: printf("Saturday"); break;
        default: printf("Invalid");
    }
    return 0;
}
```

Solutions

13. Multiplication Table

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d",&n);
    for(int i=1;i⩽10;i++)
        printf("%d x %d = %d\n",n,i,n*i);
    return 0;
}
```

Sum of n Natural Numbers

```
#include <stdio.h>
int main() {
    int n,sum=0;
    scanf("%d",&n);
    for(int i=1;i⩽n;i++) sum+=i;
    printf("%d",sum);
    return 0;
}
```

Solutions

Factorial

```
#include <stdio.h>
int main() {
    int n,f=1;
    scanf("%d",&n);
    for(int i=1;i⩽n;i++) f*=i;
    printf("%d",f);
    return 0;
}
```

Reverse a Number

```
#include <stdio.h>
int main() {
    int n,rev=0;
    scanf("%d",&n);
    while(n≠0){
        rev=rev*10+n%10;
        n⁄=10;
    }
    printf("%d",rev);
    return 0;
}
```

Solutions

Count Digits

```
#include <stdio.h>
int main() {
    int n,count=0;
    scanf("%d",&n);
    while(n≠0){
        count++;
        n/=10;
    }
    printf("%d",count);
    return 0;
}
```

Patterns

```
*
**
***
****
```

Solutions

```
#include <stdio.h>
int main() {
    for(int i=1;i⩽4;i++){
        for(int j=1;j⩽i;j++) printf("*");
        printf("\n");
    }
    return 0;
}
```

```
#include <stdio.h>
int main() {
    for(int i=1;i⩽4;i++){
        for(int j=1;j⩽i;j++) printf("%d",j);
        printf("\n");
    }
    return 0;
}
```

Solutions

break

```
#include <stdio.h>
int main() {
    for(int i=1;i⩽10;i++){
        if(i==5) break;
        printf("%d ",i);
    }
    return 0;
}
```

continue

```
#include <stdio.h>
int main() {
    for(int i=1;i⩽10;i++){
        if(i==5) continue;
        printf("%d ",i);
    }
    return 0;
}
```

Solutions

Palindrome

```
#include <stdio.h>
int main() {
    int n,temp,rev=0;
    scanf("%d",&n);
    temp=n;
    while(n≠0){
        rev=rev*10+n%10;
        n/=10;
    }
    if(temp==rev) printf("Palindrome");
    else printf("Not Palindrome");
    return 0;
}
```

Solutions

Armstrong

```
#include <stdio.h>
int main() {
    int n,temp,sum=0,r;
    scanf("%d",&n);
    temp=n;
    while(n≠0){
        r=n%10;
        sum+=r*r*r;
        n/=10;
    }
    if(sum==temp) printf("Armstrong");
    else printf("Not Armstrong");
    return 0;
}
```

Solutions

Prime Check

```
#include <stdio.h>
int main() {
    int n,flag=1;
    scanf("%d",&n);
    for(int i=2;i<n;i++){
        if(n%i==0){ flag=0; break; }
    }
    if(flag && n>1) printf("Prime");
    else printf("Not Prime");
    return 0;
}
```