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IT
DA

Q1 while(1) {
num = as.numeric(readline("Number: "));
if (num >= 0) {
print ("Positive");
}
if (num < 0) {
print ("Negative");
}
}

Q2. while (1) {
num = as.numeric (readline("Number: "));
if (num >= 0) {
print ("Positive");
} else {
print ("Negative");
}
}

Q3. year = as.numeric (readline ("year: "));
if (year %% == 0 & year %% 100 != 0) {
print ("Leap");
} else {
print ("Not Leap");
}

Q4.

```
num1 = as.numeric(readline("Num1: "));
num2 = as.numeric(readline("Num2: "));
if (num1 > num2) {
    print(num1);
} else {
    print(num2);
}
```

Q5.

```
while (TRUE) {
    ch = readline("Command: ");
    switch(ch,
        "R" = print("RED");
        "G" = print("Green");
        "B" = print("Blue");
        "Y" = print("Yellow");
    )
}
```

Q6.

```
maths = as.numeric(readline("Maths: "));
physics = as.numeric(readline("Pysics: "));
chemistry = as.numeric(readline("Chemistry: "));
sum = maths + physics + chemistry;
percentage = (sum/3);
print(percentage);
if (percentage >= 90) {
    print("O");
} else if ("percentage >= 80") {
    print("E");
} else if ("percentage >= 70") {
    print("A");
} else if ("percentage >= 60") {
    print("B");
} else if ("percentage >= 50") {
    print("C");
}
```

Q7.

```
num = as.integer(readline("Number: "));
if (num %% 100 == num %% 10) {
    print("Palindrome");
} else {
    print("Not Palindrome");
}
```

Q8.

```
radius = as.numeric(readline("Radius: "));
print(3.14 * radius**2);
lm = as.numeric(readline("Length: "));
bre = as.numeric(readline("Breadth: "));
print(lm * bre);

a= as.numeric(readline("a: "))
b= as.numeric(readline("b: "));
c= as.numeric(readline("c: "));
s= (a+b+c)/2;
area = sqrt(s*(s-a)*(s-b)*(s-c));
print(area);
```

Q9.

```
N = as.numeric(readline("NUM: "));
for (i in 1:N) {
    print(i**2);
}
```

Q10.

```
num = as.numeric(readline("Number: "));
fact = 1;
for (i in 1:num) {
    fact = fact * i;
}
print(fact);
```

Q11

```
sum = 0
for(i in seq(1, 39, 2)){
    sum = sum + i**2;
}
print(sum);
```

Q12.

```
num = as.integer(readline("Number: "));
temp = num;
rev = 0;
while(num != 0){
    dig = num%%10;
    rev = rev*10 + dig;
    num = num%/%10;
}
if(rev == temp){
    print("Palindrome");
} else{
    print("Not Palindrome");
}
```

Q13.

```
x = 1;
pattern = paste();
for(i in 1:4){
    for(j in 1:i){
        pattern = paste(pattern, x);
        x = x+1;
    }
    print(pattern);
    pattern = paste();
}
```

Q14.

```
num = as.integer(readline("Number: "))
sum = 1;
for ( i in 2:(num-1)) {
    if ( num %% i == 0) {
        sum = sum + i;
    }
}
if ( sum == num) {
    print ("Perfect Number");
} else {
    print ("Not a perfect Number");
}
```

Q15.

```
n = as.integer(readline("n: "))
a = 0;
b = 1;
i = 0;
while ( i < n) {
    if (i == 0) {
        print (a);
    } else if (i == 1) {
        print (b);
    } else {
        sum = a+b;
        print (sum);
        a = b;
        b = sum;
    }
    i = i+1;
}
```