



Paper Coding Worksheet

Chapter:	1
Unit:	1
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unit 1

paper coding

Q1

→ N → ↓ N ← ← N ↓ → N ↓ →

Q2

img 1

● ↓ N → ↑ N ↓ → N ↓ → ↓ N

img 2

N ↓ → ↓ N ↓ → ↓ N ↓ → ↓ N

img 3

N ↓ ↓ N ↓ N ↓ → N ↓ ↓ N

img 4

→ N ↓ N ↓ → N → N ↓ ↓ N ↓ N ↓ N ↓

img 5

→ → → N ↓ ← N ↓ ← N ↓ ← N

img 6

→ N ↓ → N ↓ ● ↓ N ← N ↓ ↓ N → N ↓ ↓ N ● → N

Unit 2

"Go straight west at this crossroads. You will see four buildings. When you see the

post office, turn right across the post office.

```
In [ ]: obtain current_location

print "Go straight west at the crossroads"

repeat
    determine buildings
until post_office is seen

print "Turn right across the post office"

print "Go straight"

determine building_count as 0

repeat
    determine next_building
until Italian_restaurant is seen

compute hotel_found as true

if hotel_found is true then
    print "The third building is the hotel you are looking for"
else
    print "Hotel not found"
end if
```

```
In [ ]: #unit 3
#q1
print( int("50")+50 )
print( "50" + str(50) )
```

100
5050

```
In [ ]: #q2
print(int('1'+ '0'+ '0'+ '0'))
```

1000

```
In [ ]: #unit 4

#q1
width=30
height=60
area=width*height
print("Area of rectangle :",area)
```

Area of rectangle : 1800

```
In [ ]: #q2
base= 3
perpendicular= 4
```

```
h = (base**2 + perpendicular**2)**0.5
print("Hypotenuse =",h)
```

Hypotenuse = 5.0

In []: *#unit 5*

```
#q1
n = int(input("Enter an Integer: "))

if n % 2 == 1:
    print("Is the integer odd?: True")
else:
    print("Is the integer odd?: False")
```

Enter an Integer: 20
Is the integer odd?: False

In []: *#q1 (diff output check)*

```
n = int(input("Enter an Integer: "))

if n % 2 == 1:
    print("Is the integer odd?: True")
else:
    print("Is the integer odd?: False")
```

Enter an Integer: 21
Is the integer odd?: True

In []: *#q2*

```
n = int(input("Enter an integer: "))

if n % 2 == 0 and 0 <= n <= 100:
    print("Is the input an even integer between 0 and 100? True")
else:
    print("Is the input an even integer between 0 and 100? False")
```

Enter an integer: 12
Is the input an even integer between 0 and 100? True

In []: *#unit 6*

```
#q1

game_score = int(input("Enter game score: "))

if game_score > 1000:
    print("game_score=",game_score)
    print("You are a master.")
else:
    print("game_score=",game_score)
```

Enter game score: 1500
game_score= 1500
You are a master.

In []: *#q2*

```
x = int(input("Enter an integer betn -100 and 100:"))
print("x=",x)

if x > 0:
    print(x,"is a natural number")
```

Enter an integer betn -100 and 100:50
x= 50
50 is a natural number

```
In [ ]: #unit 7

#q1
letter = input("Enter a letter: ").lower()

if letter in ['a', 'e', 'i', 'o', 'u']:
    print(letr,"It is a vowel")
else:
    print(letter,"It is a consonant")
```

Enter a letter: k
k It is a consonant

```
In [ ]: #q2
a = int(input("Enter a: "))
b = int(input("Enter b: "))

if a % b == 0:
    print(a,"is a multiple of ",b)
else:
    print(a,"is not a multiple of ",b)
```

Enter a: 30
Enter b: 3
30 is a multiple of 3

```
In [ ]: #unit 8

#q1
bts = ['V', 'J-Hope', 'RM', 'Jungkook', 'Jin', 'Jimin', 'Suga']

for member in bts:
    print(member)
```

V
J-Hope
RM
Jungkook
Jin
Jimin
Suga

```
In [ ]: #q2
total = 0
for i in range(1, 101):
```

```
    total += i
    print("Sum of integers from 1 to 100:", total)
```

Sum of integers from 1 to 100: 5050

```
In [ ]: #q3
        even_sum= 0

        for i in range(0, 101, 2):
            even_sum += i
        print("Sum of even numbers from 1 to 100:", even_sum)
```

Sum of even numbers from 1 to 100: 2550

```
In [ ]: #q4
        odd = 0

        for i in range(1, 101, 2):
            odd += i

        print("Sum of odd numbers from 1 to 100:", odd)
```

Sum of odd numbers from 1 to 100: 2500

```
In [ ]: #unit 9

        #q1
        i = 1
        while i <= 10:
            print("2 x", i, "=", 2 * i)
            i += 1
```

2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20

```
In [ ]: #q2
        x=1
        while x<=10:
            i = 1
            while i <= 9:
                print(x, "x", i, "=", x * i)
                i += 1

            x += 1
```

$1 \times 1 = 1$
 $1 \times 2 = 2$
 $1 \times 3 = 3$
 $1 \times 4 = 4$
 $1 \times 5 = 5$
 $1 \times 6 = 6$
 $1 \times 7 = 7$
 $1 \times 8 = 8$
 $1 \times 9 = 9$
 $2 \times 1 = 2$
 $2 \times 2 = 4$
 $2 \times 3 = 6$
 $2 \times 4 = 8$
 $2 \times 5 = 10$
 $2 \times 6 = 12$
 $2 \times 7 = 14$
 $2 \times 8 = 16$
 $2 \times 9 = 18$
 $3 \times 1 = 3$
 $3 \times 2 = 6$
 $3 \times 3 = 9$
 $3 \times 4 = 12$
 $3 \times 5 = 15$
 $3 \times 6 = 18$
 $3 \times 7 = 21$
 $3 \times 8 = 24$
 $3 \times 9 = 27$
 $4 \times 1 = 4$
 $4 \times 2 = 8$
 $4 \times 3 = 12$
 $4 \times 4 = 16$
 $4 \times 5 = 20$
 $4 \times 6 = 24$
 $4 \times 7 = 28$
 $4 \times 8 = 32$
 $4 \times 9 = 36$
 $5 \times 1 = 5$
 $5 \times 2 = 10$
 $5 \times 3 = 15$
 $5 \times 4 = 20$
 $5 \times 5 = 25$
 $5 \times 6 = 30$
 $5 \times 7 = 35$
 $5 \times 8 = 40$
 $5 \times 9 = 45$
 $6 \times 1 = 6$
 $6 \times 2 = 12$
 $6 \times 3 = 18$
 $6 \times 4 = 24$
 $6 \times 5 = 30$
 $6 \times 6 = 36$
 $6 \times 7 = 42$
 $6 \times 8 = 48$
 $6 \times 9 = 54$

$$7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$7 \times 8 = 56$$

$$7 \times 9 = 63$$

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$