**1)** (i) read -p "enter employee name: "name

read -p "enter hours worked: " hours

read -p "enter rate per hour (e.g., 25.50): " rate

(ii) basic\_pay=$(bc <<<"$hours \* $rate")

(iii) if [[ $basic\_pay -gt 70000 ]]; then

tax=$(bc <<<"$basic\_pay\*0.25")

else if [[ $basic\_pay-gt 15000 ]]; then

tax=$(bc <<<"$basic\_pay\*0.15")

else

tax=0

fi

(iv) net pay=$(bc <<<"$basic\_pay - $tax")

echo "employee name: $name"

echo "basic pay: $basic\_pay"

echo "tax: $tax"

Echo "net pay: $net­­\_pay"

**2.** #include <stdio.h>

int main() {

char \*filename = "test. Txt;

int fd = open(filename, o\_WRONLY | (CREAT, 0644);

if (fd == -1) {

perror("open");

exit(1);

}

const char \* "message = "hello world\n”;

ssize\_t bytes\_ written = write(fd, message, strlen(massage));

if (bytes\_written == -1){

perror("write");

close(fd);

}

1seek(fd, SEEK\_ SET);

char buffer[100];

ssize\_ t bytes\_ read = read(fd, buffer, sizeof(buffer));

if (bytes\_read == -1) {

perror("read");

close(fd);

exit(1);

}

close(fd);

printf("read content from '%s' %s\n", buffer);

return 0;

}

**3)** (i) read -p "enter customer ID: "customer\_id

read -p "enter customer name: "customer\_name

read -p "enter units consumed: "units\_consumed

(ii) calculate\_bill() {

local units=$1

local bill\_amount=0

if [[ $units -le 199 ]]; then

bill\_amount=$(bc <<<"$units \* 1.20")

else if [[ $units -le 400 ]]; then

bill\_amount=$(bc <<<"$199 \* 1.20+ ($units-199)\*1.50")

else if [[ $units -le 600 ]]; then

bill\_ amount=$(bc <<<"199 \* 1.20 + 201 – 150 + ($units - 400) \* 1.80”)

else

bill \_amount= $(bc <<<”199 \* 1.20 + 201 \* 1.50 + 200 \* 1.80 + ( $units -600) \*2.00”)

fi

echo $bill\_ amount

}

(iii) total\_bill=$(calculate\_bill $units\_consumed)

echo "customer id. $customer\_id"

echo "customer name: $customer\_name"

echo "units consumed: $units consumed"

echo "total bill (ksh) $total\_bill"