Question 1: YouTube Video Quality Selection Scenario: A user is watching a YouTube video and the platform must select the appropriate video quality based on two conditions: - Internet speed - Whether the user selected "Auto" mode or manual mode. 💡 Logic Steps : - Ask if the user selected "Auto" or "Manual" mode. - If "Auto": - If internet speed > 10 Mbps → Play 1080p - Else if speed > 5 Mbps → Play 720p - Else if speed > 2 Mbps → Play 480p - Else → Play 240p If "Manual": - Ask for selected quality (e.g., 240p, 480p, 720p, 1080p) - Play the selected quality

CODE:

```
mode = input("Enter mode:")
if mode == "Auto":
    ispeed = int(input("enter speed:"))
    if ispeed>10:
        print("play 1080p")
    elif speed>5:
        print("play 720p")
    elif speed>2:
        print("play 480p")
    else:
        print("play 240p")
elif mode=="manual":
    quality = int(input("enter video quality: (240p, 480p, 720p, 1080p)"))
    print("video quality",quality)
else:
    print("enter correct mode")
```

Output:

```
Enter mode:manual
enter video quality: (240p, 480p, 720p, 1080p)240
video quality 240
Enter mode:Auto
enter speed:5
play 480p
```

Question 2: Hotstar Subscription Plans Scenario: Based on the user's subscription type and payment status, show what content they can access.

Logic Steps : - Ask for subscription type: Free, Super, or Premium - Ask for payment status: Active or Expired - If subscription is Free: - Allow only basic content - If subscription is Super: - If Active → Allow sports + series (with ads) - If Expired → Show message to renew - If subscription is Premium: - If Active → Allow all content (no ads) - If Expired → Show message to renew

CODE:

```
sub_type = input("enter type of subscription:(Free, Super, or Premium)")

payment_status = input("enter payment status:(Active or expired)")

if sub_type == "free":

    print("Allow only basic content")

elif sub_type == "super":

    if payment_status == "Active":

        print("Allow sports + series (with ads) ")

    elif payment_status == "Expired":

        print("Renew subscription")

elif sub_type == "premium":

    if payment_status == "Active":

        print(" Allow all content (no ads) ")

    elif payment_status == "Expired":

        print("Renew subscription")

else:

    print("Enter correct subscription tyoe")
```

Output:

```
enter type of subscription:(Free, Super, or Premium)super

enter payment status:(Active or expired)Active

Allow sports + series (with ads)
```

Question 3: Bank Loan Approval System Scenario: A bank checks whether a person is eligible for a loan based on credit score and salary.

Logic Steps : - Ask user for credit score - If credit score >= 750: - Ask for monthly salary - If salary >= ₹30,000 → Approve Loan - Else → Ask to increase income - Else if credit score between 600–749: - Ask for co applicant - Else if credit score < 600: - Reject application

CODE:

```
credit_score = int(input("Enter credit score:"))
 if credit_score >=750:
    salary=float(input("enter the salary:"))
     if salary >= 30000:
         print("loan approved")
     else:
          print("increase your income")
elif credit_score >= 600 and credit_score <=749:
     coapplicant=("do you have coapplicant (yes/no): ")
     if coapplicant =="yes":
        print("loan approved")
elif coapplicant == "no":
      print("no coapplicant --- loan rejected")
else:
     print("loan rejected")
```

Output:

Enter credit score:550

loan rejected

Enter credit score:650

do you have coapplicant (yes/no): yes

loan approved

Question 3: Bank Loan Approval System

Scenario: A bank checks whether a person is eligible for a loan based on credit score and salary.

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CODE:

```
first_order=input("is this your first order (yes/no): ")
cart_value=int(input("enter the cart value:"))
if first_order == "yes":
    if cart_value >=149:
        print("Apply Free Delivery + 20% Off")
    else:
        print( "Apply Only Free Delivery” )
elif first_order == "no":
    if cart_value >=199:
        print("Apply ₹50 Off coupon")
    else:
        print(“No offer applicable, add more items!")
else:
    print("Invalid input, please enter yes or no")
```

Output:

```
is this your first order (yes/no): yes
enter the cart value:99
Apply Only Free Delivery

is this your first order (yes/no): no
enter the cart value:200
Apply ₹50 Off coupon
```

Question 5: E-commerce Offer Eligibility

Scenario: A user qualifies for a discount based on cart value and whether they are a first-time buyer.

Logic Steps : - Ask if user is a first-time buyer (Yes or No) - Ask for cart total - If first-time buyer: - If cart ≥ ₹1000 → 30% discount - Else → 10% discount - If not a first-time buyer: - If cart ≥ ₹2000 → 15% discount Else → No discount

CODE:

```
first_time=input("is this first time (yes/no): ")
cart_total=int(input("Enter the cart value:"))
if first_time == "yes":
    if cart_total >=1000:
        print("30% discount")
    else:
        print("10% discount")
elif first_time == "no":
    if cart_total >=2000:
        print("15% discount")
    else:
        print("no discount")
else:
    print("please enter yes/no only")
```

Output:

```
is this first time (yes/no): yes
Enter the cart value:1500
30% discount

is this first time (yes/no): no
Enter the cart value:1900
```